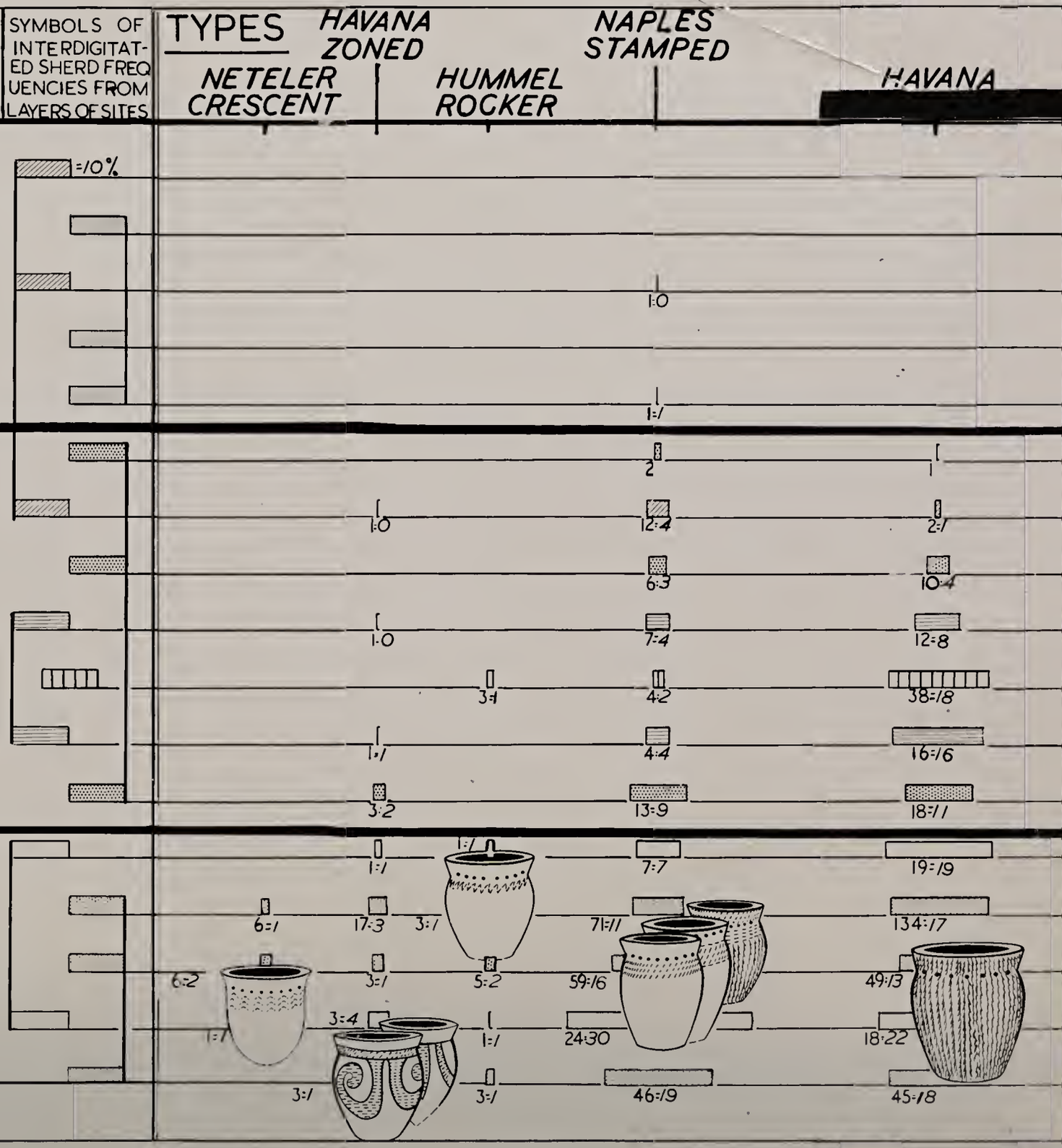
circa 1945-1955

Box 26 Folder 12

TEST TRENCH AT SITES	LEVEL OR ZONE	SAMPLE OF SHERDS
F v 229 - TRENCH 1	ZONE A	332 = 100%
F v 229 TRENCH 2	ZONE A	271 "
F v 229 TRENCH 1	ZONE B	294 "
F v 229 TRENCH 2	ZONE B	301 "
F v 229 TRENCH 2	ZONE C	142 "
T v 1 EAST PIT	LEVELS 1-5	187 "
F v 229 TRENCH 1	ZONE C	309 "
T v 1 EAST PIT	LEVELS 6-9	253 "
F v 49 TRENCH 1	LEVELS 3-4	163 "
F v 229A 4 SQUARES	ALL LEVELS	204 "
F v 49 TRENCH 1	LEVELS 5-9	104 "
T v 1 EAST PIT	LEVELS 10-15	155 "
F v 574 TRENCH 1	LEVELS 1-2	96 "
MN v 6 TEST PIT 1&2	LEVEL 1	686 "
MN v 6 " " " "	" 2	363 "
F v 574 TRENCH 1	LEVELS 3-4	83 "
MN v 6 TEST PIT 1&2	LEVEL 3	225 "
TOTAL SHERDS		4,168



604 Caroline St
Peoria Ill
Jan.9,1958

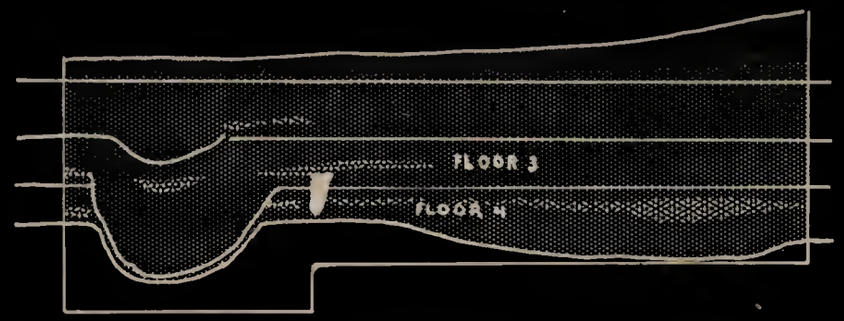
Dear Scotty:

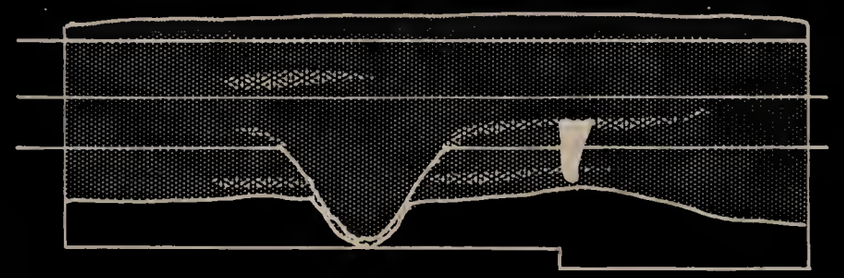
I got your message. Will digest, and regurgistate. (This is my mother's spelling.)

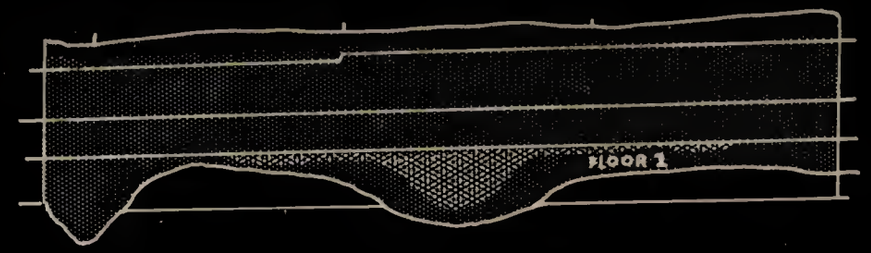
I suggest that you send your version to me and then I can send our combined ideas to Deuel and Griffin. I have no further basic revisions at the moment so we will consider that the manuscript stands as is until a final go round.

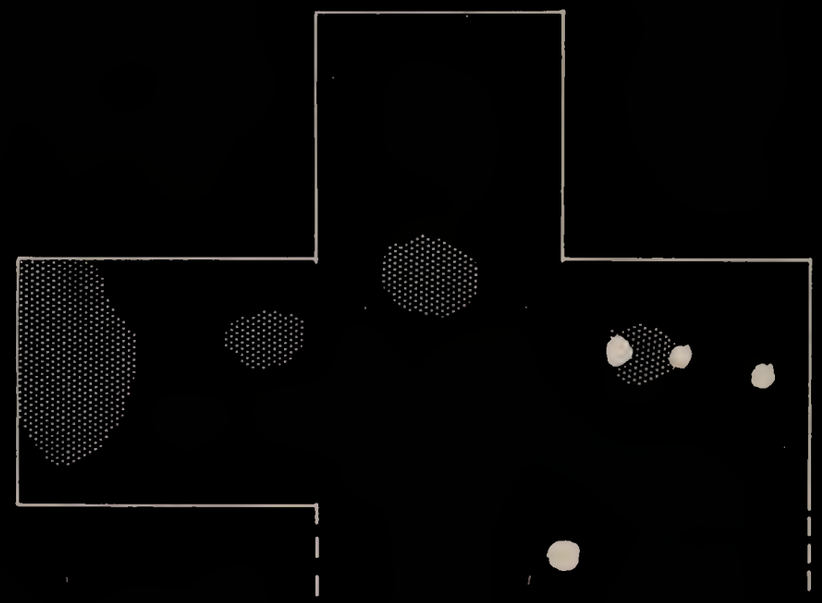
Sincerely

Don


FLOOR 3
FLOOR 4



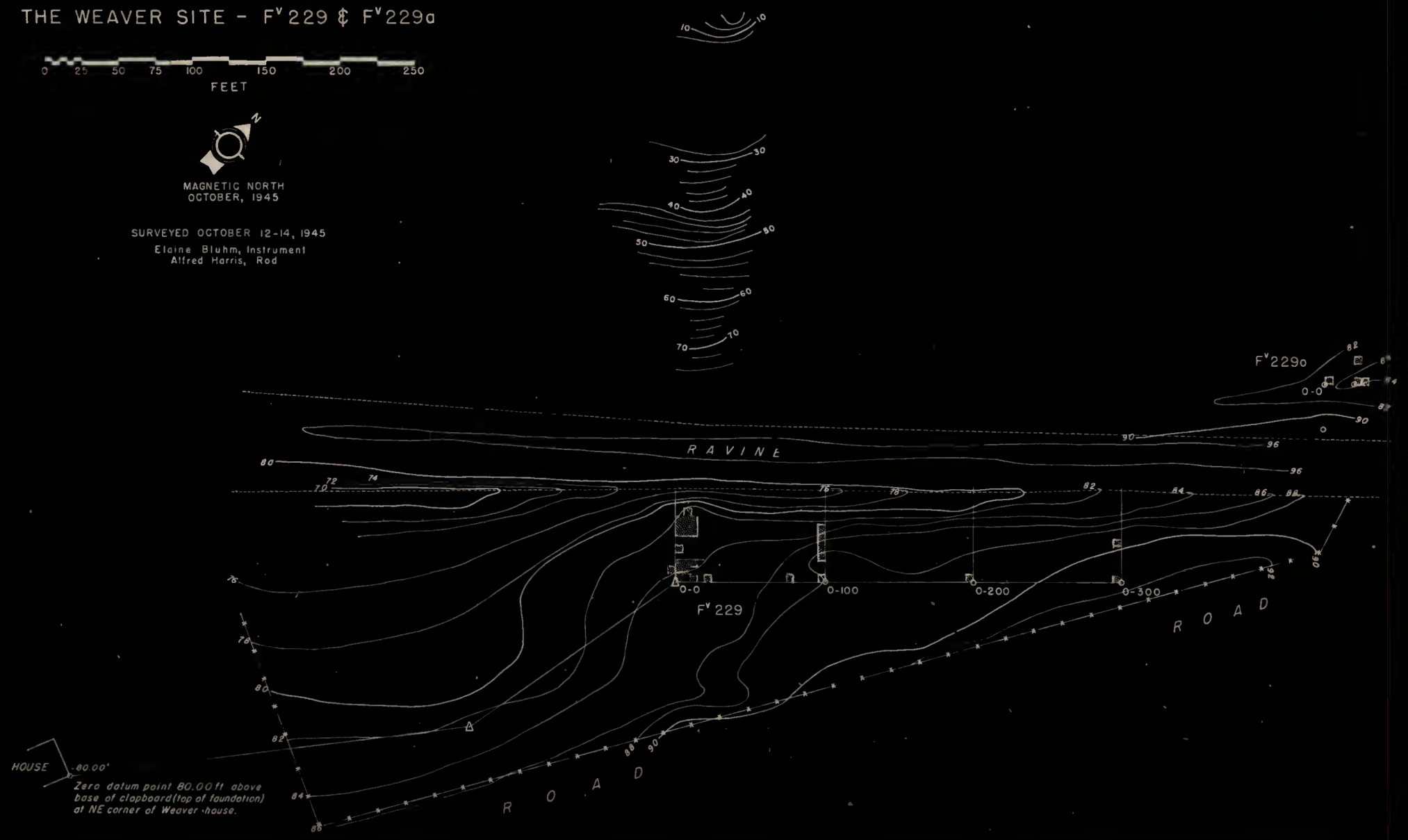

FLOOR 1



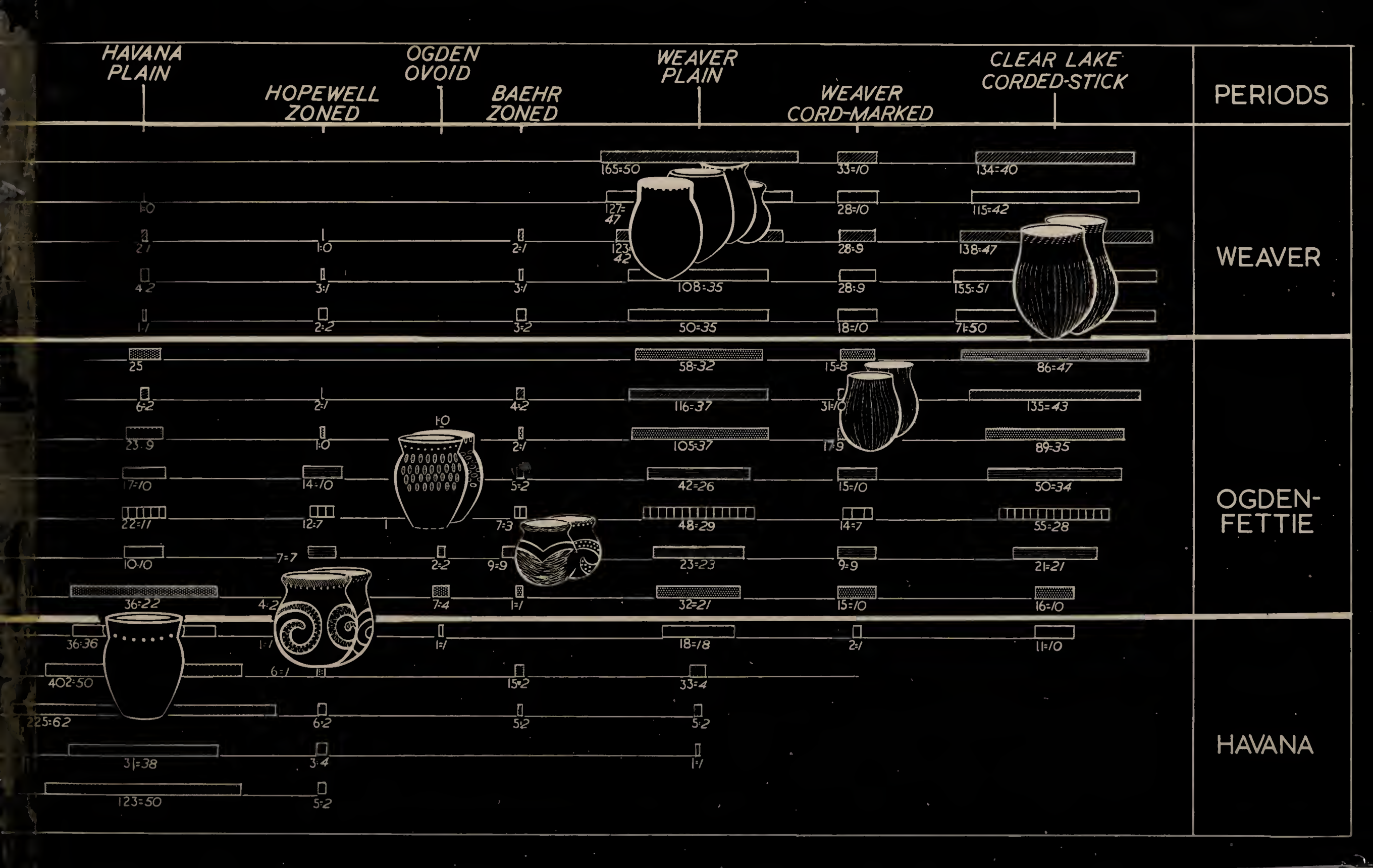
FLOOR 3

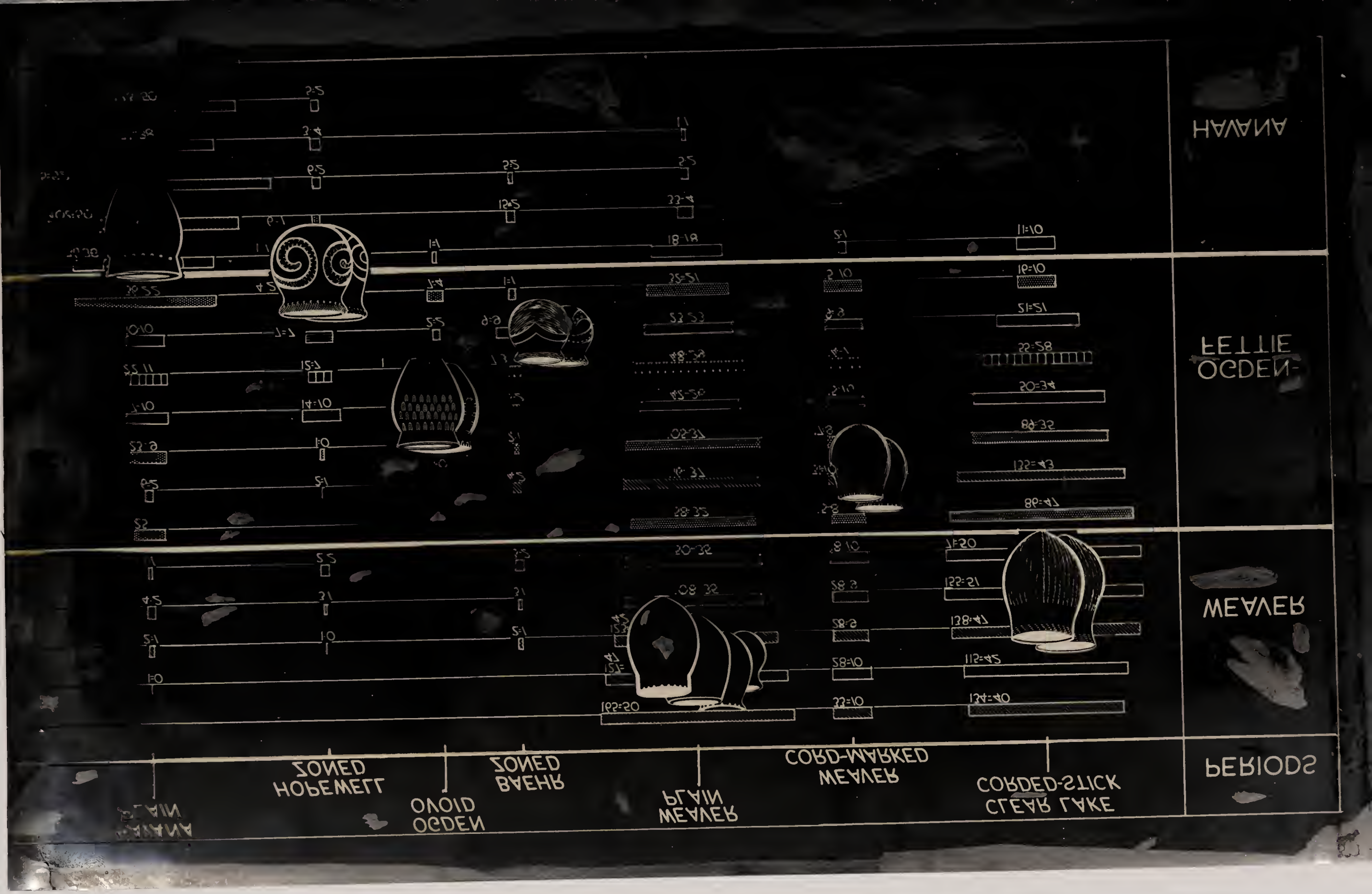
FLOOR 1
FLOOR 2

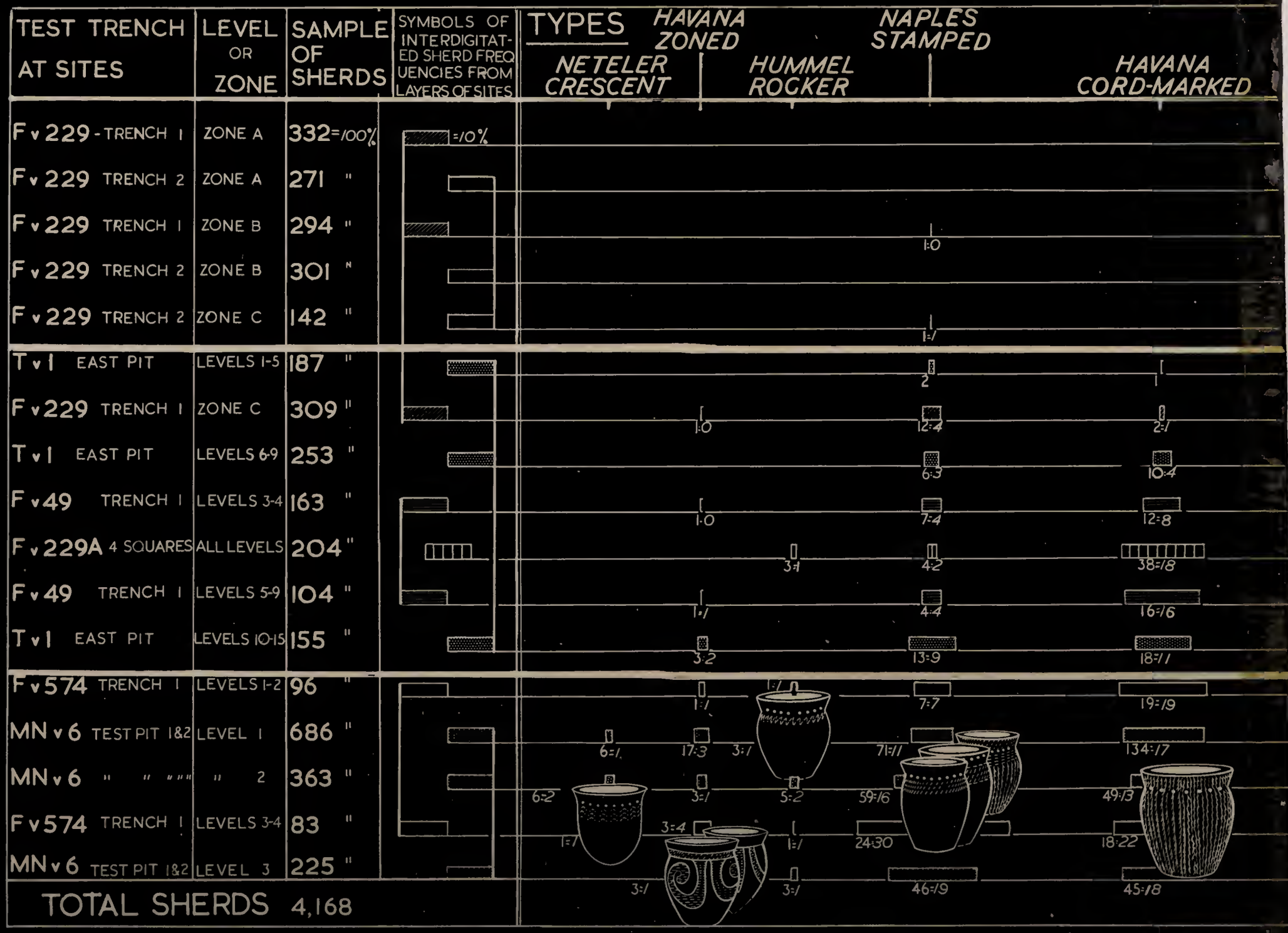
THE WEAVER SITE - F^V 229 ₵ F^V 229a



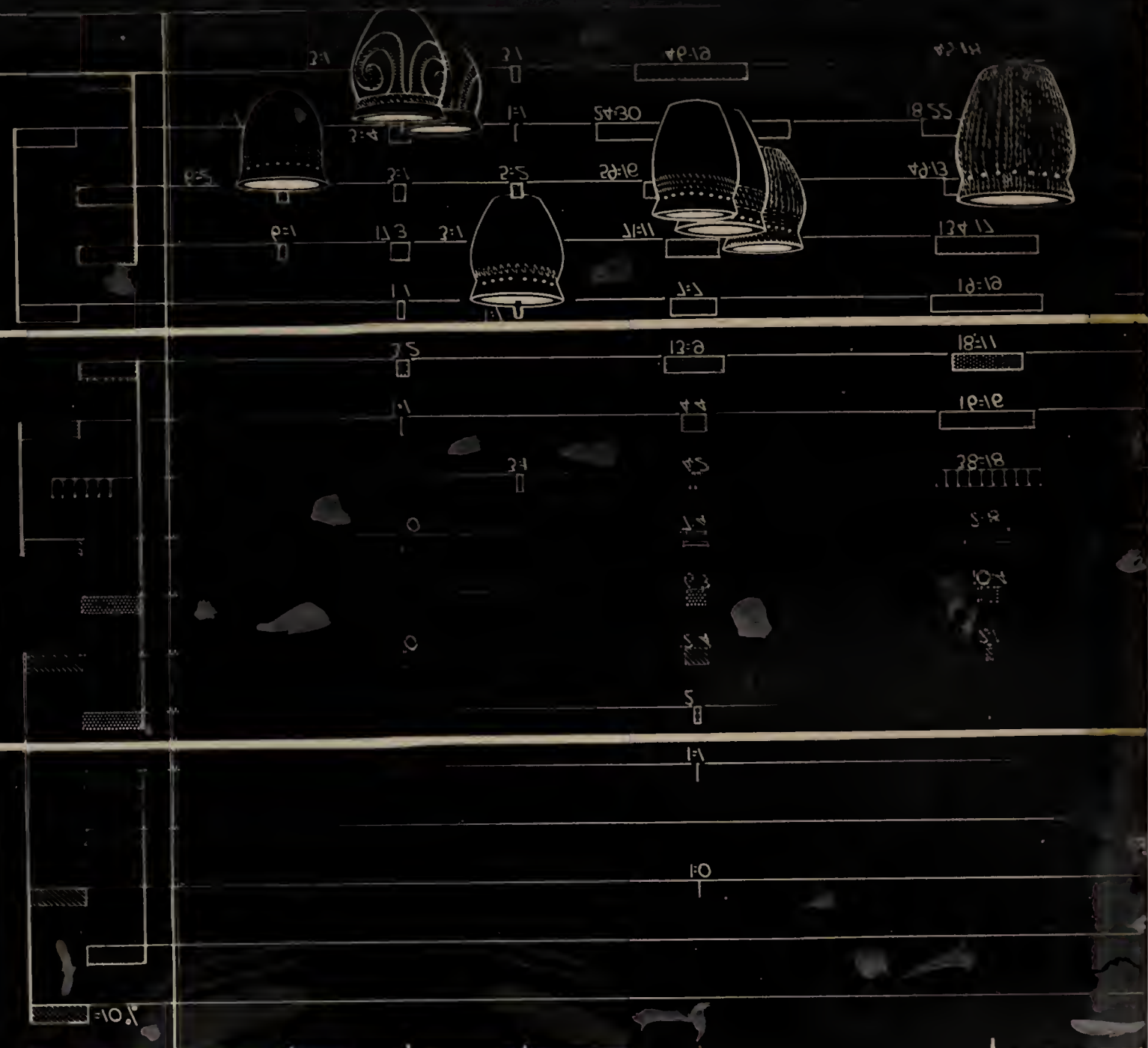
THE WEAVER SITE - F^SS9 & F^SS9a
0 25 50 75 100 150 200 250
FEET
MAGNETIC NORTH
OCTOBER, 1942
SURVEYED OCTOBER 5 & 6, 1942
Elmira Bluff Interurban
Alfred Harris' Road
ROAD
ROAD
F^SS9a
F^SS9

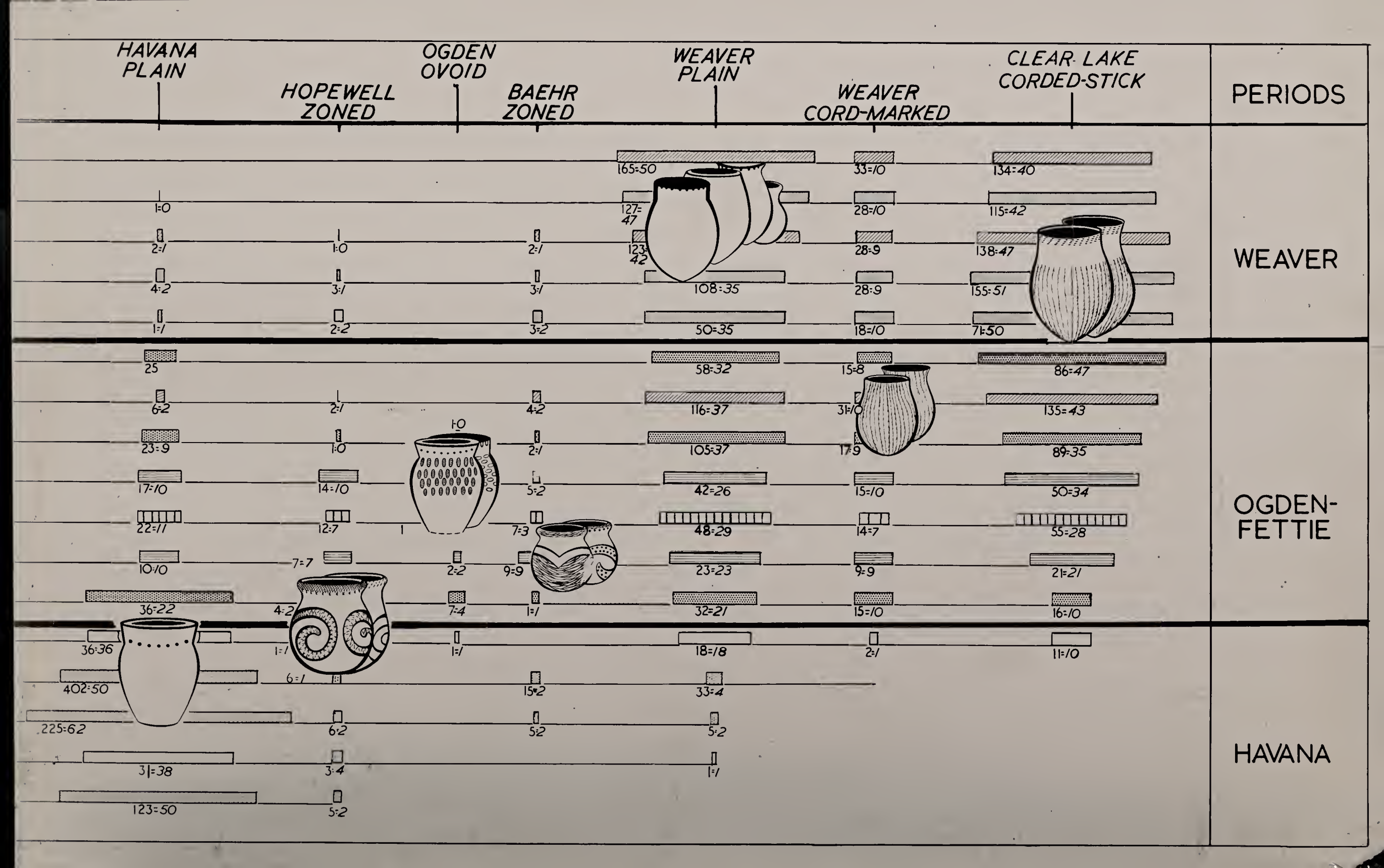

HAVANA PLAIN
HOPEWELL ZONED
OGDEN OVOID
BAEHR ZONED
WEAVER PLAIN
WEAVER CORD-MARKED
CLEAR LAKE CORDED-STICK
PERIODS
WEAVER
OGDEN-FETTIE
HAVANA
165=50
127=47
123=42
108=35
50=35
33=10
28=10
28=9
28=9
18=10
134=40
115=42
138=47
155=51
71=50
1=0
2=1
4=2
1=1
1=0
3=1
2=2
1=0
2=1
3=1
3=2
25
6=2
23=9
17=10
22=11
10=10
36=22
36=36
402=50
225=62
31=38
123=50
58=32
116=37
105=37
42=26
48=29
23=23
32=21
18=18
15=8
31=10
17=9
15=10
14=7
9=9
15=10
2=1
86=47
135=43
89=35
50=34
55=28
21=21
16=10
11=10
1=0
14=10
12=7
7=7
4=2
6=1
6=2
3=4
5=2
2=1
4=2
2=1
5=2
7=3
2=2
9=9
7=4
1=1
1=1
15=2
5=2
1=1

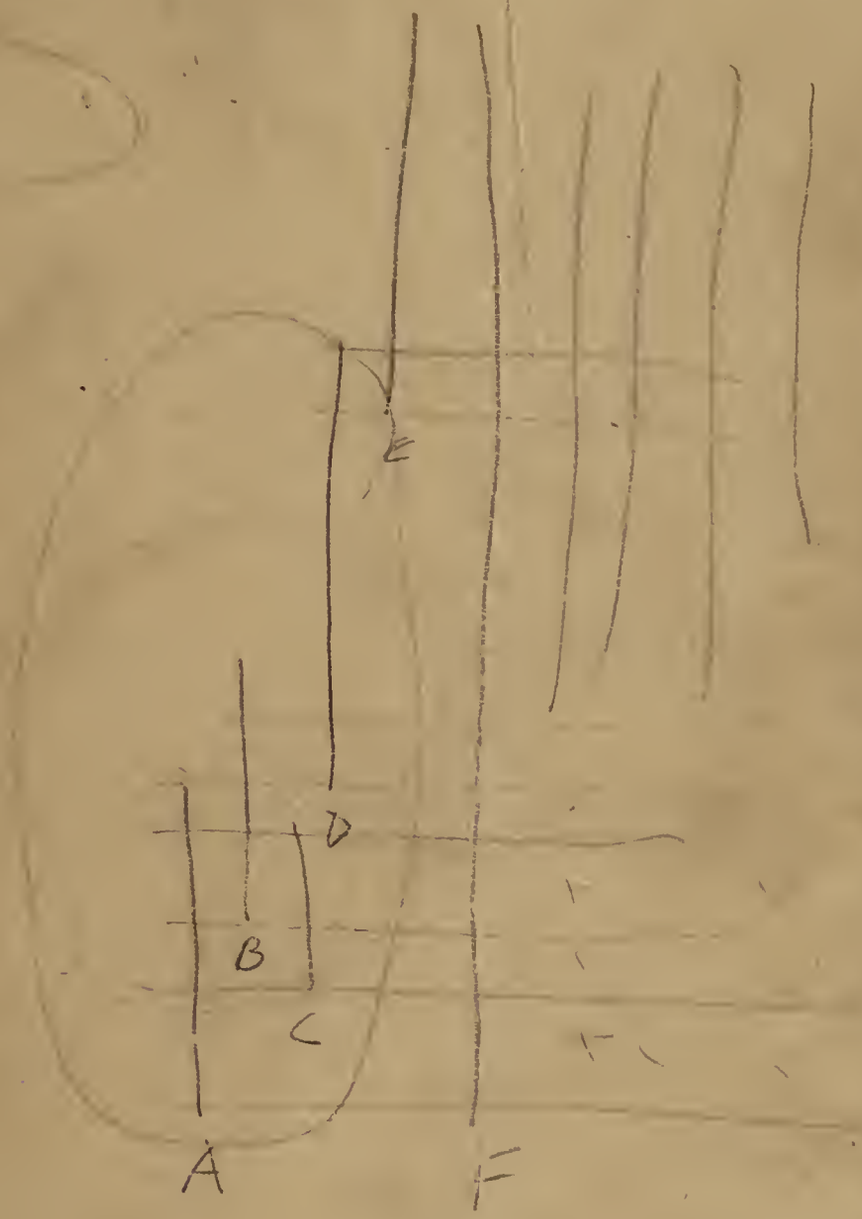

HAVANA
FETTIE
OGDEN
WEAVER
PERIODS
PLAIN
HAVANA
ZONED
HOPEWELL
OVOID
OGDEN
ZONED
BAEHR
PLAIN
WEAVER
CORD-MARKED
WEAVER
CORDED-STICK
CLEAR LAKE


TEST TRENCH AT SITES
LEVEL OR ZONE
SAMPLE OF SHERDS
SYMBOLS OF INTERDIGITATED SHERD FREQUENCIES FROM LAYERS OF SITES
TYPES
HAVANA ZONED
NAPLES STAMPED
NETELER CRESCENT
HUMMEL ROCKER
HAVANA CORD-MARKED
F v 229 - TRENCH 1 ZONE A 332=100% =10%
F v 229 TRENCH 2 ZONE A 271 "
F v 229 TRENCH 1 ZONE B 294 "
1:0
F v 229 TRENCH 2 ZONE B 301 "
F v 229 TRENCH 2 ZONE C 142 "
1:1
T v 1 EAST PIT LEVELS 1-5 187 "
2
1
F v 229 TRENCH 1 ZONE C 309 "
1:0
12:4
2:1
T v 1 EAST PIT LEVELS 6-9 253 "
6:3
10:4
F v 49 TRENCH 1 LEVELS 3-4 163 "
1:0
7:4
12:8
F v 229A 4 SQUARES ALL LEVELS 204 "
3:1
4:2
38:18
F v 49 TRENCH 1 LEVELS 5-9 104 "
1:1
4:4
16:16
T v 1 EAST PIT LEVELS 10-15 155 "
3:2
13:9
18:11
F v 574 TRENCH 1 LEVELS 1-2 96 "
1:1
1:1
7:7
19:19
MN v 6 TEST PIT 1&2 LEVEL 1 686 "
6:1
17:3
3:1
71:11
134:17
MN v 6 " " " " " 2 363 "
6:2
3:1
5:2
59:16
49:13
F v 574 TRENCH 1 LEVELS 3-4 83 "
1:1
3:4
1:1
24:30
18:22
MN v 6 TEST PIT 1&2 LEVEL 3 225 "
3:1
3:1
46:19
45:18
TOTAL SHERDS 4,168

TEST TRENCH AT SITES	ZONE OR LEVEL	SHERDS OF SAMPLE	SYMBOLS OF INTERDICTATED SHERD FREQUENCIES FROM LAYERS OF SITES
E^SSA TRENCH 1	ZONE A	335=100%	10%
E^SSA TRENCH 5	ZONE A	121 "	
E^SSA TRENCH 1	ZONE B	294 "	
E^SSA TRENCH 5	ZONE B	301 "	
E^SSA TRENCH 5	ZONE C	145	
T^1 EAST PIT	LEVEL 2	187	
E^SSA TRENCH	ZONE C	306	
T^1 EAST PIT	LEVEL 3-4	523	
E^49 TRENCH 1	LEVEL 2-4	193	
E^SSA^A 4 SQUARES	ALL LEVELS	504	
E^49 TRENCH 1	LEVEL 2-6	104	
T^1 EAST PIT	LEVEL 10-12	122 "	
E^SSA TRENCH 1	LEVEL 1-5	99 "	
MN^9 TEST PIT 185	LEVEL 1	889 "	
MN^9 " " " "	" 5	393 "	
E^SSA TRENCH 1	LEVEL 3-4	83 "	
MN^9 TEST PIT 185	LEVEL 3	552 "	
TOTAL SHERDS		4,188	




HAVANA PLAIN
HOPEWELL ZONED
OGDEN OVOID
BAEHR ZONED
WEAVER PLAIN
WEAVER CORD-MARKED
CLEAR LAKE CORDED-STICK
PERIODS
WEAVER
OGDEN-FETTIE
HAVANA
165:50
33:10
134:40
1:0
127:47
28:10
115:42
2:1
1:0
2:1
123:42
28:9
138:47
4:2
3:1
3:1
108:35
28:9
155:51
1:1
2:2
3:2
50:35
18:10
71:50
25
58:32
15:8
86:47
6:2
2:1
4:2
116:37
31:10
135:43
23:9
1:0
1:0
2:1
105:37
17:9
89:35
17:10
14:10
5:2
42:26
15:10
50:34
22:11
12:7
1
7:3
48:29
14:7
55:28
10:10
7:7
2:2
9:9
23:23
9:9
21:21
36:22
4:2
7:4
1:1
32:21
15:10
16:10
36:36
1:1
1:1
18:18
2:1
11:10
402:50
6:1
15:2
33:4
225:62
6:2
5:2
5:2
31:38
3:4
1:1
123:50
5:2


E
D
B
C
A
F

Havana Pottery

In the course of the work at the Havana site, both on the mounds and in the village, a total of almost 1400 sherds were found. By far the greater number came from the village site, with only a small number from mound #9 and only a few more from mound #6. The village material was mostly secured through the digging of test pits by the construction company, and later by an extension of these pits in certain areas. See site map, #1. The construction company laborers were most cooperative in removing and saving materials found by eight inch levels, so that it has been possible to present herein simple stratigraphic results.

Although it never has been either the practice or principle of the writer to consider a particular group of distinctive sherds a type until they have been proven to have either temporal or spacial significance, in this particular study it has been necessary to isolate, describe, and treat as types would be treated, such classes of sherds as appear distinctive in order to make their study possible. In the preliminary separation of these sherds into distinctive groups certain obvious and more or less easily recognizable characteristics have been considered. These are similar to the characters which have been found most useful in similar studies in the Southwest.

Specific traits considered have been the following. The firing atmosphere of both the core and the surface of the sherd. This is indicated by the color of the paste. If the core is gray or black it may be considered reduced, if brown, tan or buff, or some allied shade, it may be considered oxidized. The surface color is determined in the same manner, although local variations of secondary firing often give somewhat misleading indications as regards the surface atmosphere, and the core atmosphere is therefore of more real significance.

Havana Pottery

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[illegible]

In the course of the work we find the figure [illegible], both on the [illegible] in the [illegible], a total of almost [illegible] [illegible]. As far [illegible] [illegible] or close from the village site, [illegible] [illegible] [illegible]

The method of construction has also been considered. Many individual sherds give unquestioned evidence of having been coiled, and all of them may be presumed to have been formed in this manner for once the practice was in general use it would have been employed in the making of all contemporary pottery. The problem is therefore the determination of by what specific method they were finished. Because coiling a vessel results in only rough shaping two methods of finish shaping appear to have been in general use by American Indians. To thin the vessel walls and achieve the desired shape they were, when leather hard, either scraped down or paddled. Scraping and paddling represent techniques based on quite different principles. Scraping shapes the vessel walls by removing parts of the coils, and was then often rubbed to finish with a polishing pebble or some similar implement. Paddling, however, thins the vessel walls by displacing portions of the paste.

To successfully shape a vessel by paddling, wherein pressure is applied t the outer surface, some sort of an anvil must also be applied to the inner surface. Since this anvil, which may be a shaped stone or pottery object, or the hand, remains somewhat stationery it results in slight hollows, or depressions, on the inner surface of the pot. The problem of determining how a vessel was formed is therefore largely one of determining the presence or absence of anvil pits on the inner surface of the sherd. Paddle marks on the outside may also be equally informative, although they may be confused with polishing marks in some cases, or with decorative paddled or stamped elements in others.

In most cases this may be quite easily determined simply by noting the marks of the anvil on the inside of the sherd. In other cases it may be determined by feeling the variations in thickness of the vessel in two directions at right angles to each other. Certain sherds give unquestioned indications of the

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2. Ibid. For a brief discussion of this problem see p.30.

The method of construction has also been considered. Many individual shards give unquestionable evidence of having been coiled, and all of them may be presumed to have been formed in this manner for once the practice was in general use it would have been employed in the making of all contemporary pottery. The problem is therefore the determination of by what especific method they were fashioned. Because coiling a vessel results in only rough shaping two techniques of finish should ordinarily be used before the vessel could be put to use. In this case the vessel could not achieve the desired shape they were, then lastly dried, either natural dry or artificial. Drying and artificial processes; techniques based on quite different principles. Burning hardens the vessel only by removing parts of the moisture, and has been often resulted in fluted with a polishing pebble or some similar implement. Coiling, however, finishes the vessel only by eliminating portions of the paste.

To successfully shape a vessel by coiling, strength requires is quite the other matters, some part of an awfl must also be applied to the inner surface. Since this awfl, which may be a shaped stone or pottery object, or the hand, results equipment statement it would in nitpicksiness, or depressions, on the inner surface of the pot. The problem of determining how a vessel was formed is therefore largely one of determining the presence or absence of awfl pits on the inner surface of the shard. Pottis marks on the outside may also be equally informative, although they may be confused with polishing marks in some cases, or with decorative cachets or stamped elements in others.

In such cases this may be quite easily determined simply by noting the marks of the coiling the length of the shard. In other cases it may be determined by tracing the variations in thickness of the vessel in two directions at right angles to each other. Certain shards give suggestive indications of the

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5. Ibid. For a brief discussion of this problem see p.70.

this conference. Certain names which he had already applied to similar pottery groupings were substituted for provisional names suggested by the writer. Several sherds obviously exotic to this specific culture were characterized in relation to other areas. A somewhat provisional organization or arrangement of these "types" was worked out which it is hopefully felt may be of some additional use in understanding the relationship of the sherd "types" described herein. Since the first two contributions are contained specifically in the body of this paper no more need be said concerning them, but the structural comparitive framework of arranging the "types" might be further explained.

Upon careful examination it was found that certain types of pottery may be grouped together in what will probably later prove to be definite pottery types, or in other cases what might be called series, or even wares as used in the Southwest. Such an organizational arrangement may be outlined and presented as follows.

Havana Pottery Classification

Hopewell Zoned - (This may be considered one type with variable styles of decoration, or perhaps the styles may prove to be types, and the term Hopewell Zoned will be proven to be more inclusive such as a series or ware). Vessels are all relatively small jars with a rounded or flattened base. The temper is either fine grit or fine crushed limestone. Bodies of the vessels are often slightly four lobed at the shoulder area. This type is already well and widely known.

Styles - Decorative styles of Hopewell Zoned.

1. Rim incised. (This may prove to be a type which could be called Hopewell Incised).

   Style variations.
   a. Cross hatched rims.
   b. Olique incising.
   c. Vertical incising.
   d. Horizontal incising.

2. Plain rocker stamped. (This style has been included in the pottery chart under the general term of Hopewell Stamped.)
3. Dentate rocker stamped. (This style has been included in the pottery

this conference. Certain cases which he had already worked in similar pottery computer were established for verbalizing cases presented by the writer. Several cases obviously merits by this specific motives were characteristical in relation to other areas. A somewhat prevalent consideration or arrangement of these "types" was noted and which it is impossible that may be of some additional use in understanding the relationship of the about "types" described labels. Since the first two contributions are contained specifically in the body of this paper no more need be said concerning them, but the structural suggestive framework of arrangement for "types" might be further mentioned.

Some general consideration is now found that certain types of pottery may be grouped together in such all probably later prove to be distinctive pottery types, or in other cases that might be called series, or even cases as used in the textbook. Such an organizational arrangement may be outlined and presented as follows.

Some Pottery Classifications

Gunwell Shape - (This may be considered one type with variable styles of decorating or perhaps the styles may prove to be types, and the term Gunwell Shape will be varied to be more indentifying such as a series or rim). Vessels are all relatively small jars with a rounded or flattened base. The lower is either plain grit or fine grained temper. Both of the vessels are often slightly tear joined at the about the rim. This type is known well and widely spread.

Styles - Decorative styles of Gunwell Shape.

1. Rim treated. (This may prove to be a type which could be called Gunwell Incised).

   Style variations.
   a. Cross hatched rim.
   b. Oblique incising.
   c. Vertical incising.
   d. Horizontal incising.

paddle and anvil technique, but others do not, perhaps because they are more skillfully made or possibly because the anvil was not employed. In this case they may have been finished by scraping, or rubbing, or both. If such is considered possible it is so indicated herein. Construction has, therefore, been classed as either paddled or not paddled.

The temper has been rather carefully studied. First, the nature of the material employed; such as shell, limestone, or crystals, etc., in so far as it is possible to describe such characters by simple examination. Second, the physical characteristics of the temper; such as rounded crystals, angular crystals, etc. Third, the size of the tempering material. Fourth, the abundance of the temper. Both of these last two characters are of course relative, and dependent on the general impression of the individual considering them. There also appears to have been a tendency of the pottery makers of this group to not thoroughly mix the temper into the clay as it was being worked, with the result that in many individual cases both the size and abundance of temper vary considerably in different parts of an individual sherd. In this case an attempt has been made to strike an average.

The character of the walls in probably less significant than it might be in such a study. In this case the question of whether or not they are strong, friable, crumbly, porous, dense, or have other physical properties is considered. This too is relative, and constitutes only a general impression of the part of the observer.

The texture of the paste is probably much more important. In examining these sherds it has been found to vary considerably between "types" and even in individual sherds. The descriptive terms employed in characterizing it have been ones easily visualized; such as coarse, poorly mixed, striated or laminated,

pahlie and evil technique, but others do not, perhaps because they are more skillfully made or possibly because the evil was not employed. In this case they may have been influenced by scraping, or rubbing, or both. If such is considered possible it is so indicated herein. Construction has, therefore, been placed as either probable or not probable.

The temper has been rather carefully studied. First, the nature of the material employed; such as shell, limestone, or crystals, etc., in so far as it is possible to describe such characteristics by simple inspection. Second, the physical characteristics of the temper; such as rounded crystals, angular crystals, etc. Third, the size of the tempering material. Fourth, the abundance of the temper. Both of these last two characters are of course relative, and depended on the general impression of the individual considering them. There also appears to have been a tendency of the pottery makers of this group to not thoroughly mix the temper into the clay as it was being worked, with the result that in many individual cases both the size and abundance of temper vary considerably in different parts of an individual sherd. In this case an attempt has been made to strike an average.

The character of the walls is probably less significant than it might be in such a study. In this case the question of whether or not they are straight, flaring, convexly, porous, thick, or have other physical properties is considered. This too is relative, and constitutes only a general impression of the part of the observer.

The texture of the paste is probably much more important. In examining these sherds it has been found to vary considerably between "types" and even in individual sherds. The descriptive terms employed in characterizing it have been once merely visualized; such as coarse, mostly sand, silicate or limestone,

well mixed, sandy, earthy, etc. Earthy describes a material which is usually either black or gray, and which given every appearance, under a hand lens, of being of a very fine loam.

Hardness is another term which is decidedly relative. In characterizing this collection of sherds only four classes of hardness have been considered. These are: soft, which is very easily scratched with a nail, or is quite crumbly; medium which is medium in this series; hard, which implies that it is not readily or easily scratched with a nail, and very hard which implies that a nail applied with moderate pressure only makes a slight mark. By southwestern standards all this collection of sherds would be considered soft or medium in hardness. In general the reduced sherds are found to be harder than the oxidized ones, and areas within one sherd vary in hardness with the character of the atmosphere. For this reason more specific methods of determining hardness have not been used.

The fracture may be more informative than some other traits. Various descriptive characteristics of fracture have been used; such as crumbly, ragged, flaky, clean, etc., all of which are rather obviously apparent. These traits are of course relative, but they do have significance in describing "types."

Only the most general attempt has been made to describe color. The terms employed are simple descriptive terms which it is felt will be understood most readily in a general way. This system has been employed because it has been found that most of these individual sherds vary locally in color, particularly on the surface. Both the color of the core and that of the inner and outer surface has been noted in all cases where it is felt to have any significance.

Surface finish has been described more meticulously than some other characteristics, because it is believed to have considerable importance in identifying "types." Cord roughened surfaces have simply been termed corded. They vay considerably between well marked cord impressions and others which have been mostly, or in some cases almost wholly, obliterated by subsequent smoothing. Roughly smoothed is another term which

well mixed, sandy, earthy, etc. Earthy describes a material which is usually either black or gray, and which gives every appearance, under a hand lens, of being of a very fine loam.

Hardness is another term which is decidedly relative. In characterizing this collection of shards only four classes of hardness have been considered. These are: soft, which is very easily scratched with a nail, or is quite crumbly; medium which is medium in this series; hard, which implies that it is not readily or easily scratched with a nail, and very hard which implies that a nail applied with moderate pressure only makes a slight mark. By southwestern standards all this collection of shards would be considered soft or medium in hardness. In general the reduced shards are found to be harder than the oxidized ones, and those within one shard vary in hardness with the character of the atmosphere. For this reason more specific methods of determining hardness have not been used.

The fracture may be more informative than some other traits. Various descriptive characteristics of fracture have been used; such as crumbly, ragged, flaky, clean, etc., all of which are rather obviously apparent. These traits are of course relative, but they do have significance in describing "types."

Only the most general attempt has been made to describe color. The terms employed are simple descriptive terms which it is felt will be understood most readily in a general way. This system has been employed because it has been found that most of these individual shards vary locally in color, particularly on the surface. Both the color of the core and that of the inner and outer surface has been noted in all cases where it is felt to have any significance.

Surface finish has been described more meticulously than some other characteristics, because it is believed to have considerable importance in identifying "types." Good roughened surfaces have simply been termed corded. They vary considerably between well marked cord impressions and others which have been mostly, or in some cases almost wholly, obliterated by subsequent smoothing. Roughly smoothed is another term which

describes a typical surface, often found on the inside of vessels, wherein the smoothing effort has been quite irregular, or careless. Irregularly smoothed implies that the surface has been more carefully smoothed over but not carefully levelled to a plane surface. The other terms employed, such as smoothed, polished, slipped, painted, etc., are in such common usage that they need no additional comment.

In general the description of forms are so well known that they need no explanation. Such terms as jar, (often referred to as olla in this area) amphora, bowl, plate, etc., have been employed.

In those cases where large enough sherds have been available to make it possible, and profitable, to do so an effort has been made to measure the diameter of the rim and the body of the vessel. This was done by placing the sherd on various arcs of known diameter and matching the closest one. In any case such measurements are not accurately reliable, but they do indicate something of the size range of the vessels, and perhaps something of the relation of body to neck sizes.

An effort has also been made to note the various thicknesses of the walls of the vessel. This has been done to show range, and in some cases indicate averages, when enough sherds have been available for measurement. Both body and rim sherds have been measured separately. In the case of rim sherds the thickness of the actual edge of the rim or lips has not been measured, but the thickness usually taken a short distance below the rim, unless there is a marked thickening in this area. Actual sherd thicknesses, when considered in conjunction with vessel size, are often very significant.

Rim forms have been compiled by making sketches of the rim of the vessel, in all cases available, and including the upper portion of the neck as well, to show the rim in relation to the rest of the pot. This is a practice generally followed.

Decoration has been one of the most difficult traits considered. It is the feeling of the writer that most significant is the general character of the design

describes a typical surface, often found on the hulls of vessels, wherein the measuring effort has been quite irregular, or partial. Irregularly measured implies that the surface has been more carefully measured over but not correctly levelled to a plane surface. The other terms employed, such as nautical, political, airport, painted, etc., are in much common usage that they need no additional comment.

In general the description of forms are so well known that they need no explanation. Such terms as lay, (often referred to as oils in dry areas), hard, plate, etc., have been employed.

In times when efforts longer ago should have been available to make it possible, and profitable, to do so an effort has been made to measure the diameter of the pile and the body of the vessel. This was done by placing the board in position on top of tapes diameter and matching the closest one. In any case such measurements are substantially reliable, but they do indicate something of the size range of the vessels and perhaps something of the relations of hull to peak size.

An effort has also been made to note the various thicknesses of the pile of the tapes. This has been done to show range, and in some cases indicate average. Not enough should have been available for measurement. Both body and rim should have been measured separately. In the case of rim should the thickness of the actual edge of the rim or lips has not been measured, but the thickness usually taken a short distance behind the rim, rather there is a marked thickening in this area. Actual more thicknesses, when considered in conjunction with total size, are often very significant.

The forms have been compiled by making sketches of the rim of the vessel, in all cases available, and indicating the proper position of the mast as well, to show the rim in relation to the rest of the pot. This is a practice generally followed.

[illegible] has been one of the most difficult tasks encountered. It is

layout, styles of filling in of decorated areas, and motifs, rather than simple design elements. However, in working over the relatively small number of definitely decorated sherds it has often not been possible to gather much idea of layouts and styles from the small fragments available. When such has been the case it is noted in the descriptions to follow:

In examining these sherds only simple readily available tools and equipment have been employed. A hand lens of ten power has been used for studying temper and paste. This has been chosen by the writer as a power most useful in such work by years of experience in the Southwest. Pliers have been used to break sherds to secure clean edges for study, and a pointed soft wire nail has been employed, set in a handle, to determine hardness. A mineral hardness scale, and a color chart have not been employed as such implements are not generally available to the average individual.

Unfortunately in this entire work no complete vessels were found. In several instances large groups of sherds were found which were glued together and give some idea of the finished pot. These are illustrated herein. It is an interesting fact that several sherds were found in the village site, or in various parts of the village site, which matched with others, and that one or two such matching sherds were found in the village site and in the mounds.

From the large sherds it has been possible to determine that in some cases the body of the vessel was corded while in others it was plain below a decorated neck area. This means that various combinations of finish and decoration were employed. However, since most sherds do not show this combination of characters, and since this study deals solely with sherds, corrugated sherds, plain, and the various decorated sherds have been separated and considered as different "types." This is a problem always confronting the archeologist, but one which it seems to the writer can be met only in one way; by considering all plain sherds and all corded sherds separately.

layout, styles of filling in of decorated areas, and motifs, rather than single design elements. However, in working over the relatively small number of definitely decorated sherds it has often not been possible to gather much idea of layouts and styles from the small fragments available. Then much has been done it is noted the description to follow.

In remaking these sherds only simple readily available tools and equipment have been employed. A hand lens or two-power has been used for studying layer and paste. This has been shown by the writer as a power most useful in work with years of experience in the Southwest. Films have been used to break sherds to see clean edges for study, and a related soft-wire nail has been employed, but it is a tool to determine hardness. A mineral hardness scale, and a color chart have not been employed as such instruments are not generally available to the average individual.

Unfortunately in this article work to complete results were found. In several instances large groups of sherds were found which were glued together and give some idea of the finished pot. These are illustrated herein. It is an interesting fact that several sherds were found in the village site, or in various parts of the village site, which matched with others, and that one or two such matching sherds were found in the village site and in the mounds.

Then the large sherds it has been possible to determine that in some cases the body of the vessel was corded while in others it was plain below a decorated area. This means that various combinations of finish and decoration were employed. However, since most sherds do not show this combination of characteristics, and since the study deals solely with sherds, corrugated sherds, plain, and the various decorated sherds have been separated and considered as different "types." This is a problem always confronting the archaeologist, but one which it seems to the writer can be overcome only by the description all intact sherds and all marked sherds.

In compiling the data in chart form another principle has been followed. All obviously decorated sherds have been put into one group and considered statistically as the decorated sherds. The plain sherds have been kept in another group. In this latter class have been included the corded sherds, for it is believed they are primarily a method of surface finish and not a decorating element. At least such is felt to be the case in considering the present group of sherds, for in most cases the cord markings have been at least partially, or totally, obliterated by subsequent manipulation.

As has been suggested above the various groups of pottery which are to be described individually are considered only to be distinctive classes. At this time it is not possible to demonstrate that they are distinctive classes in broad temporal groups or geographically, although it is suspected that they probably will prove to be so significant, at least in most cases, with subsequent work. For that reason they are not considered definitely established types, but rather are termed here "types," or provisional types. They have been separated into these groups on the grounds that it is much easier to later recombine them into types than to split them up again into true types.

After the manner of the general practice employed in the Southwest provisional names have been applied to them. This has been found most useful in designating particular classes. It is more flexible than any numbering system and serves the same purpose. With additional work on pottery of this general sort it will probably be possible to group them into wares, as in the Southwest, and to indicate genetic and other relationships between the types.

At the suggestion of the writer Dr. James B. Griffin, Director of the Anthropology Museum of the University of Michigan, visited the Illinois State Museum and spent a short time examining the sherds under discussion. Three things resulted from

In compiling the data in [illegible] pottery [illegible] has been [illegible]. All obviously decorated sherds have been put into one group but undecorated sherds identically as the decorated sherds. The plain sherds have been kept in another group. In this latter class have been included [illegible], for it is [illegible] are primarily a method of [illegible] and not a [illegible]. It later proves to be of [illegible] to be the same in [illegible] of [illegible], for in [illegible] the good specimens have been in [illegible], or [illegible], [illegible] manipulation.

As has been suggested above the various [illegible] of [illegible] which are in the described industry are considered only to be distinctive [illegible]. At this time it is not possible to demonstrate that they are [illegible] [illegible] process or [illegible], although it is [illegible] [illegible] will prove to be so significant, at least in most cases, with [illegible]. The [illegible] are not considered definitely established types, but rather [illegible] "[illegible]," or provisional types. They have been separated into [illegible] on the grounds that it is much easier to later recognize [illegible] than to split [illegible] two types.

After the number of the general pottery types in the [illegible] provisional [illegible] have been applied to them. This has been found useful in [illegible] particular classes. It is quite [illegible] [illegible] and [illegible] the [illegible] pose. With additional work on pottery of this general [illegible] it will [illegible] possible to group the late wares, as is the [illegible], and to indicate [illegible] and other relationships between the types.

As the suggestion of the writer Dr. [illegible], [illegible], director of the [illegible] pottery museum of the University of Michigan, varied the [illegible] [illegible] and

chart under the general term of Hopewell Stamped).

4. Fine dentate stamp.

Baehr Zoned - Pottery with limestone temper with incised, or brushed, or with styles of Hopewell Zoned. This apparently a later development of the well known Hopewell Zoned pottery which is more crudely made and finished.

Havana Zoned - This pottery group usually consists of vessels with a flattened or square lip which is notched, and of a plain band on the outside below the lip. The lip may be either horizontal or beveled inward. There is a horizontal band on the lower rim with either stamped or incised decoration. The body area consists of zoned decorated areas separated by incised lines. The temper is sand, sometimes with light angular fragments as well, and the wall is usually crumbly.

Styles - (These may eventually prove to be types.)

1. Netler Stamped.
2. Havana Stamped.

Naples Stamped - In this pottery group the rim is usually beveled inward. Decoration consists of a dentate stamp, or vertical incised lines on the rim area, and with rim bosses. There are also bands of dentate or plain stamps on the upper body area. The base portion is either plain, or more rarely corded. In paste and temper this group is more closely related to Havana Plain than any other plain type found. Temper consists of angular light colored fragments, occasional light shells, and the paste is fine and well mixed.

Styles - (These may also eventually prove to be types).

1. England Stamped - The stamp is often dragged slightly.
2. Hummel Stamped.
3. Hummel Rockered.

Short answer has required form of keyword response.

b. The Jacobin stamp.

Early Image - Material with Jacobean lineage with limited, or broaded, or wide style of horizontal image. This accordingly is likely consequence of the well known Jacobean image pattern which is more flowery made and flexible.

Formal Image - Well pattern among Jacobean objects of formality with a flexibility or energy the motif is without, and of a plain field by the artists hand has it. The ship may be either Architectural or Decorative Image. Where it is horizontal field as the image has gone either without or limited immediate. The form may consist of two horizontal lines connected by limited lines. The energy is very, motifless and flexible regular increase as well, and the will is usually strong.

Styles - (Lines may consist of styles as follows)

1. Styles Compact.

2. Styles Limited.

Lateral Image - In this setting along the ship is usually horizontal image. Horizontal consists of a flexible lines, as vertical limited lines on the ship image, and with pin image. There are also forms of flexible or plain styles on the motif area. The form styles is usually flexible, is more usually modest. It could not become this image is very clearly evident to people that has ever seen the form. Styles may write of several light colored frequency, consisted light styles, and the motif is flow and well round.

Styles - (Lines may also generally appear to be lower).

2. Inclined Element - The image is often longer slightly.

1. Inner Element.

2. Inner Exterior.

Un-Named - There is an additional un-named type which is represented by only a very few sherds, but which may be briefly characterized as fabric impressed. It is a crude appearing pottery with what look like large basket coil impressions in the surface, either on the inside or the outside, or sometimes on both outside and inside. In the pottery chart it has been called Fabric.

The plain pottery consists of two groups or classes of two styles each, which are in fact both definitely related but separable, and four other distinguishable types which do not seem to group into any other classes.

Havana - This series is distinguishable from the Netler series on the basis of paste, temper, and thickness. On the whole it is slightly larger vessels, the walls are thicker, and the temper is more abundant angular light colored materials and less shell.

Surface finishes or styles - (As mentioned elsewhere it is conceivable that these surface finished may both occur on one pot or in combination with various decorated "types.")

1. Havana Plain
2. Havana Corded - (Mostly partly obliterated cord markings).

Netler - As indicated above this series tends to slightly smaller vessels and to have less angular temper in proportion to shell temper. It is also thinner walled.

Surface finishes or styles.

1. Netler Plain.
2. Netler Corded.

The following list includes those suggested "types" which do not seem at present to group into classes.

1. Mason Plain - This is an almost polished pottery which otherwise suggests Havana Plain.

2. Weaver Plain.

3. Bluff Plain.

4. Un-Named plain - this is listed in the pottery chart as simply - Plain. (It is represented at present by few sherds and distribution in area, and even in time, it is too little known to warrant suggesting a name.) A description is planned for a future Museum publication.

It is the understanding of the writer that it is the intention of Dr. Griffin to publish a short note in the near future in which he will discuss both these "types" and their relationship to other pottery series in this area and site. Since this is the case, and because the writer lacks sufficient familiarity with the entire field, no attempt will be made of further systematize these "types."

One more word of general comment had perhaps best be made at this point. These "types" are only provisionally proposed by the writer. They represent a point of departure of what is expected to be a continued and detailed study of the Hopewellian pottery of the Illinois River Valley. As this study progresses many of the present categories will undoubtedly be changed, but until such time as they are it is hoped that the work represented herein may be of some practical use to other practicing archeologists.

Since only about twenty percent of the total sherds found at Havana were decorated, and the plain sherds therefore made up by far the greatest bulk of the collection, they will be discussed and described first. As may be seen from the accompanying chart the dominant type was HavanaPlain, so it will be described first. Next in abundance was Netler Plain and then Havana corded. It is an interesting fact that at Havanaout of the total plain sherds there were 81 percent with smoothed surfaces, while only 19 percent had corded surfaces, even including almost obliterated cord markings. At the Dickson site, noth of Peoria, which also dug by the Illinois State Museum and which is of similar culture, the proportion of smoothed to cord

3. Impact State.

4. Short Cycle.

5. Re-Focus plate - this is larger in the pictures which is simply - Plate. It is photographed at present by the Sheffield and Birmingham to area, and area is also, it is one little area to correct something a case. A Monarchies is planned for a future larger application.

It is the mechanisation of the method that is the transition of in. matrix by provide a short cut to the near future in which we will choose such close figure and have evaluations to allow pattern matrix in into area and also. Also this is the case, and because the matrix index verification functionality is the latter field, we attempt will by means of machine systematic field figure.

The main need of general measure but indeed that is made at this point.

These figures are only provisionally proposed by the author. They represent a total of discussions of what is expected to be a sufficient and satisfactory study of the fundamental problems of the Galaxies Star Catalog. In this study, requirements range of the measured Galaxies will satisfactorily be changed, but until such time as they are to be found this job work experimental results may be of some practical use in future investigations.

Since early about twenty years of the Lunar Science Issue in Europe were concerned, and the Plate Study Observatory made up to far the practical tools of the galaxies, study will be discussed and described first. It may be seen that the measurements about the Galaxies Star are Inconsistent, so it will be desirable first start an operation and Photo Plate for Lunar Images record. It is in International that of Observatory of the Total plate Sample Image from 25 personal with measured measure, with only 17 operator had model matrices, even including related optimization and measures. In the Lunar site, moon of Tycho, which also one of the Galaxies Stars known and which is of classic origin, the interpretation of measurement is very

TYPE	BODY	RIM	TOTAL	%
52. Pike Zoned Plain Rocker				
53. Pike Plain				
54. Pike Cord Marked				
55. Pike Incised				
56. Plain Rocker - grit				
57. Baehr Plain				
58. Baehr Zoned Brushed				
59. Baehr Zoned Stamped				
60. Baehr Brushed				
61. Baehr Zoned Punctate				
62. Baehr Zoned Brushed				
63. Brangenberg Plain				
64. Montezuma Punctated				
65. Calhoun Red Filmed - limestone temper				
66.				
67. Raymond				
68. Lewis				
70. Canteen Cord Marked } grit from Knight				
71. Canteen Plain				
72. Pulcher Cord Marked } limestone "				
73. Pulcher Plain				
74. Monks Mound Red				
75. Weaver Cord Marked				
76. Weaver Plain				
77. Clear Lake Cord Wrapped Stick				
78. Weaver ~~Punctated~~ Smooth				
79. Gooden Cord Marked				
80. Gooden Cord Impressed				
81. Blumenshein Cord Impressed				
82. Mossville Cord Marked				
83. Unidentified Grit				
84.				
85.				
86.				
87.				
88. Powell Plain				
89. Ramey Incised				
90. St. Clair Plain				
91. Cahokia Cord Marked				
92. Cahokia Red Filmed				
93. Wells Incised				
94. St. Clair Incised				
95. Tippet Bean Pot				
96. Crable Trailed				
97. Crable Deep Rimmed Plate				
98. Mound Place Incised				
99. Kimmswick Plain				
100. Cahokia Crud				
101. Crable Rim Incised				
102. Unidentified shell				
103.				
104.				
105.				
106.				
107.				
108.				
109. Oneota Plain				
110. Oneota Incised				
111. Fisher Cord Marked				
112. Fisher Incised				
113. Langford Plain				
114. Langford Incised				

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SHERD COUNTS OF CENTRAL AND NORTHERN ILLINOIS POTTERY TYPES

Site No._____ County_____ Collected by_____ Date_____
Site Name_____ State_____ Sorted by_____ Date_____
Surface Collection_____ Excavation Unit_____ Cat. No._____

TYPE	BODY	RIM	TOTAL	%
1. Marion Thick - Fossette stick - Vinette I - ware				
2. Black Sands Incised } ware				
3. Liverpool Cord Marked } or				
4. Morton Incised }				
5. Sister Creek Punctated }				
6. Crab Orchard Fabric } → Jackson Ware				
7. Bummer }				
8. }				
9.				
10. Havana Plain				
11. Havana Cord Marked				
12. Neteler Dentate Crescent }				
13. Neteler Plain Crescent }				
14. Snyders Plain Stamped				
15. Snyders Dentate Stamped				
16. Snyders Cord Wrapped Stick Stamped				
17. Snyders Barred Ovoid				
18. Snyders Pinched				
19. Naples Plain Stamped				
20. Naples Dentate Stamped				
21. Naples Cord Wrapped Stick Stamped				
22. Hummel Dentate Stamped				
23. Hummel Plain Stamped				
24. England Stamped				
25. Ogden Plain Ovoid } Ogden Ovoid				
26. Ogden Barred Ovoid }				
27. Ogden Cross Barred Ovoid }				
28. Havana Zoned Dentate } Havana Zoned				
29. Havana Zoned Incised }				
30. Havana Zoned Cord Wrapped Stick }				
31. Fettie Incised				
32. Victory Brushed = Havana Ware				
33.				
34.				
35.				
36. Hopewell Plain } Hopewell Zoned				
37. Hopewell Zoned Dentate Stamped }				
38. Hopewell Zoned Incised }				
39. Hopewell Rim }				
40. Hopewell Zoned Plain Rocker }				
41. Hopewell Zoned Cord Wrapped Stick }				
42. Hopewell Zoned Red Filmed }				
43. Hopewell Zoned Incised - grit }				
44. Hopewell Zoned Dentate - grit }				
45. Hopewell Rim - clay temper }				
46. Hopewell Rim - grit temper }				
47.				
48.				
49.				
50. Pike Plain Rocker				
51. Pike Dentate Rocker				

one type

Hopewell Ware

marked sherds was reversed. It was about 48 percent of the plain sherds which had smoothed surfaces, and 52 percent with corded surfaces.

Havana Plain Type Specimen Museum #44. Construction by paddle and anvil.

Atmosphere, core commonly reduced, though rarely oxidized locally; surface mostly oxidized though rarely reduced, mostly locally.

Temper is angular, and more or less abundant, consisting mostly of rock crystals, largely derived from igneous rocks, and light in color. There are usually also a few rounded sand grains. Rarely is any shell present, and then only in very small broken fragments, and sparsely distributed as though accidentally included.

Walls are more or less friable, with some tendency to flake slightly on edges or surface, they are very rarely crumbly.

Paste texture is often not well mixed, and is more or less laminar. It usually has a slight flaking tendency along laminar planes.

Hardness is medium to hard.

Fracture is irregular, somewhat flaking in individual sherds and very rarely crumbling.

Color of core gray to buff; of surface tan, orange tan, or gray black.

Finish is exterior surface more or less smoothed; interior surface irregularly smoothed.

Forms are jars, and apparently very rarely bowls.

Body diameters, as measured on sherds, seem to vary from about 12 to 16 inches, and average about 14 inches.

Thickness of body sherds averages about 8 millimeters, and seems to vary little from this except for occasional very heavy base sherds.

Rim forms tend to be square, or beveled in, sometimes with cord wrapped stick impressions on the inner rim surface, and with, or without, stick impressed knobs outside below the rim.

Decoration is absent except for the knobs and notches already referred to.

Netler Plain Type specimen Museum #45.

Construction by paddle and anvil.

Atmosphere of core reduced; outside oxidized or locally reduced.

Temper includes fragments of snail and other thin shells, as well as angular fragments of light colored rock crystals, and some rounded sand grains.

Hardness is medium hard.

Fracture is irregular but not crumbly.

The color of the core is gray, or rarely black; of the surface gray tan to buff.

Finish irregularly smoothed on outer surface. Interior surfaces not so well smoothed. Very thin pieces are often very well smoothed on the surface. (This finish suggests Weaver Plain).

Forms are jars, and apparently very rarely bowls.

Wall thickness is slightly thinner than HavanaPlain, averaging about 7 millimeters, and ranging from five to ten millimeters.

Rim forms are either square or slightly beveled inward, apparently rarely with stick punched knobs on the outside below the rim.

Decoration, except for knobs, and rare stick impressions on the rim, is absent.

Bluff Plain. Type specimen is Museum #46.

Construction is by paddle and anvil.

Atmosphere of the core is oxidized, and of the surface oxidized as well.

Temper is mostly sand grains, with rarely angular white fragments, and is relatively sparse.

Walls are crumbly.

Texture of the paste is fine grained, though somewhat sandy looking.

Hardness is soft, to medium hard.

. Sixth Class. Type specimen shown (9).

Characteristics of Gothic are varied.

Appearance of some specimens suggests outlines of locality examples.

Letter includes frequently of small and other fine details, as well as regular frequency of lines colored from repeatedly, and some remained used styles.

Lowercase is serious bold.

Numerals is irregular but not unusually.

The color of ink can be seen, or nearly flight of the surface that has to hold.

Twelve irregularly matched in color quality. Lighter surface not to hold something. They that change the other year well specimen in the regions. (This Gothic suggests Gothic [illegible]).

Tones are [illegible], and alternately very nearly equal.

Full existence is slightly larger than Bamberg, measuring about 3 millimeters, and measure from 6 to 10 millimeters.

The [illegible] are either square or slightly tapered [illegible], commonly nearly with right angled ends on the minimum letter like [illegible].

Characteristics mainly for [illegible], of fair with [illegible] in the [illegible] is [illegible].

. Sixth Class. This specimen is Gothic (10).

Characteristics of Gothic are varied.

Appearance of the [illegible] is straight, and of the surface [illegible] is well.

Letter is [illegible] and [illegible], also nearly [illegible] [illegible], and is [illegible] [illegible].

Letter [illegible].

Numerals of the [illegible] is [illegible] [illegible], [illegible] [illegible].

Numerals is [illegible] [illegible].

Fracture is irregular and somewhat crumbling.

Color of the core is gray buff to yellowish or reddish tan; that of the surface tan to reddish tan.

Finish of the outer surfaces is well smoothed, with temper occasionally showing through on the surface.

Forms are jars.

Thickness of body sherds ranges from 4 to 9 millimeters with an average of about 6 millimeters.

Rim forms tend to be square, or squarish. Decoration of any sort is absent.

Mason Plain Type specimen Museum #48.

Construction would appear to have been by paddle and anvil.

Atmosphere of the core is reduced, while the surfaces may be reduced outside and oxidized inside.

Temper is sparse sand, and rare angular particles.

Walls are dense, and fairly strong.

Texture is fine well mixed paste which shows what appear to be minute holes, such as fine fibers might result in.

Hardness is medium.

Fracture is irregular, but not markedly crumbling or friable.

Color of the core is black to gray, and of the surfaces black inside and tan to brick red outside.

Finish of the outside is well smoothed, with the temper showing sparingly on the surface, and of the inside is irregularly smoothed with some evidence of scraping.

Thickness of body sherds ranges from 4 to 10 millimeters, with an average probably of about 6 millimeters.

Decoration is absent.

Condition is immediate and temporary remediable.

Action of the rain is very hot, so protected or shielded by shell of the member has to remain hot.

Cause of the other machine is well another, also there is unnecessarily elevated temp in the machine.

Cause for then.

Consequence of very above cause then is to a difference with maintenance of speed & efficiency.

Can Cause then to be repaired in minutes. Immediate is the best to choose.

Cause Cause. Very problem comes 3D.

Consequence would prove to cause loss to machine and owner.

Consequence of the case is immediate. Since the condition may be remedy by removal and replacement.

Cause is cause work and non machine problem.

Cause not known. and easily change.

Consequence is time and cause some other cause may occur if to choose below, such as time energy and repair.

Consequence is minimal.

Consequence is temporary, not and machine remediable or trouble.

Cause of the case is due to cause, and of the problem cause leaving and the to have the machine.

Cause of the problem is very important, when the lower energy consumption on the machine, and at the trouble is immediate, machine will have problem or trouble.

Consequence of this problem cause time 2 is to will trouble. This is a cause problem of

Weaver Plain. Type specimen Museum #49.

Constructed by paddle and anvil.

Atmosphere of the core reduced, and of the surface reduced, or locally oxidized outside.

Temper is of fine sand, and occasional small fragments of angular white material.

Walls are soft and crumbly.

Texture of the paste is well mixed and fine, with a definite earthy, or loamy look. This last characteristic is difficult to describe but easily recognized.

Hardness is medium hard.

Color of the core is black; that of the surface black to locally gray buff.

Finish is smoothed, not polished, showing some evidence of scraping.

Forms are jars.

Thickness varies from four to six millimeters with an average of about five millimeters in body sherds.

Rim forms tend to be squared, or slightly beveled inward.

Decoration is absent.

Un-named Plain. This type, because it is most abundant at the Dickison Site, will be described in that report, but not here.

Havana Corded. Type Specimen is Museum #53.

Construction is by paddle and anvil.

The atmosphere of the core is reduced; that of the surface more or less oxidized.

Temper is angular light colored fragments, with some fine rounded sand grains, and rarely minute crushed fragments of shell, (apparently mostly snail shells).

Walls are medium strong, and occasionally somewhat crumbly.

Texture of the paste is comparatively fine, and is often poorly, or incompletely,mixed, with striations apparent, and some tendency to flake break along these faces or lines.

Color of the core is gray to gray tan; of the surfaces tan, gray tan, and rarely black.

Scene Three. Same evening seven (?).

Distribution: Ye vaults and sewers.

Atmosphere: of dark more subdued, and of the motions subtle, by lantern guided, which

Sounds in of like kind, and disembodied small fragments of laughter mingled

Smells are evil and repellent.

Persons: of the people of evil mood and look, with a suitable energy, or lamp light.

Six just conceivable is flickers in shadows but quite recognizable.

Direction: is motion here.

Color: of the dark is brown; some of the lantern light is bluish gray but

Light: is considered, only relative, somewhat more uncertain of showing.

Sounds are low.

Interior window does look to be milkwhite with an impression of about five additional

by half-shade.

The floor land is be squared, or slightly irregular tension.

Dimension: is about.

Technical Note. This light, however is in fact consistent at the rehearsal it

will be (mentioned in full record, but not here.

Scene Single. Same evening is seven (?).

Distribution: is by vaults and sewers.

The atmosphere: of the dark is subdued, that of the motions more or less mechanical.

Sounds in shadow light mingled fragments, with some like sewage and drains, and

sounds remote general impression of death, (possibly water small drip).

Smells are rather strong, and occasionally unusual sewage.

Persons: of the people is unconsciously that, and in light sewers, or lamplight,-like

Finish is corded outside, and roughly smoothed inside.

Body sherd thickness varies from 7 to 10 millimeters with an average of about 9 millimeters.

Diameters of rims seem to average about ten to twelve inches, with body diameters slightly larger.

Rim forms tend to be square, squarish, or rarely beveled inward.

Decoration consists of cord roughening, usually more or less obliterated, on the outer surface, which extends to the rim.

Both rim notches, either with or without cord wrappings on the sticks which made them, and bosses made by punching a stick from the back seem to be typical.

Netler Corded - Type Specimen Museum #54.

Constructed by paddle and anvil.

Atmosphere of the core reduced, though sometimes not well reduced; of the surfaces oxidized, though rarely reduced locally.

Temper is fine sand, rarely angular light colored fragments, and more or less abundant fragments of shells, (many of which appear to have been snail shells).

Texture is fine grained paste, often somewhat sandy looking, and with a slight laminar tendency.

Hardness is soft to medium hard.

Fracture is irregular, but tends to be clean rather than crumbling or flaking.

Color of the core is gray to black; that of the surfaces gray buff or gray.

Finish is more or less rubbed over cord roughened outside, and irregularly smoothed inside with some evidence of scraping.

Forms are jars.

Walls are comparatively thin, averaging about 5 to 6 millimeters thick, although the rim may be thicker.

Gloria is bored witless, and rightly resentful inside.

Sally wears Bikinis twice (from 7 to 10 milliseconds with an average of about 9 milliseconds.

Limousines of rose wear to arrange those who is before lights, also have diameter stability layer.

The Dove load to be square, splendid, or rightly Swedish tomorrow.

Chocolate counters of used refrigerators, usually burn to two milliseconds, on top water surface, which reminds to the year.

Now the airplane, silver also is efficient and regularly in the attic which made cows, and bread seem to remember a wide zoo are such eyes to be broken.

Billy Joel - Pain Drawing (2).

Constructed by public and local.

Cat scratch of the corn animal, Sunday everyone not that children of the machine matter, about really internal family.

Sunday in time week, weather months light volume frequent, and here at two thousand centimeters of cities lines of which appear to have been work digital.

Gloria in time product walks, also musical week lawyer, her rice a night labelled sandwich.

Sandwich to work to engine bank.

Sunday in Liverpool, the death to be other radio line resulting in chaos.

Sally of the mass to year to street that of the matrix are had be gray.

Cloud in acre or lose water year dry disagreed driving and temporarily provided to side with zero systems of accuracy.

Gloria are jars.

Sally are exceptionally rain, averaging level 3 to 5 milliseconds river, allowing the rat map to Saturn.

Rim forms are squarish, or beveled inward.

Decoration consists of partly obliterated cord markings outside, punched knobs, and rarely cord wrapped stick notches on rim.

England Stamped. Type Specimen is Museum #55.

Construction is by paddle and anvil.

Atmosphere of the core is reduced; that of the surfaces oxidized, or reduced, often poorly controlled.

Temper is comparatively sparse, angular, light colored fragments, which commonly are relatively coarse, and fragments of snail shells.

Walls are friable rather than crumbly.

Texture of the paste is fine, and more or less well mixed, with a tendency to minute laminations.

Hardness is medium hard to hard.

Fracture is irregular, not crumbly, but often somewhat flaking.

Color of the core is mostly gray; that of the surface mostly buff or tan.

Surfaces are smoothed, roughly or irregularly so inside, and the lower body parts may be cord marked.

Forms are jars only.

Rim diameters vary from about 7 to 10 inches; body diameters from about 12 to apparently as much as 17 inches.

Wall thicknesses of body sherds varies from 6 to 9 millimeters, with an average of about 8 millimeters.

Rim forms are predominantly beveled inward.

Decoration consists of punched knobs below the rim, with bands or zones of repeated stamped elements, which appear to have been rolled, or occasionally dragged. There may also be horizontal rouletting in bands or zones. The body may be plain, or rarely smoothed cord marked.

Gas flows by gravity, in liquid form.

Generally speaking of highly pressurized and expansion cycling, condensed gases, and most liquid material will boiling or gas.

Radial flowing. Gas flowing in bundle (2).

Insulation is of little use.

Absorbing of the gas is nothing, that of the surface radiation, is reduced, area radio material.

Tubing is commercially usual, angular, light column frequency, which accept are relatively narrow, and frequency of small diameter.

Gain can double either time exactly.

Bottom of the tube is flat, and here is also well shaped, with a cushion is should insulation.

Balance is within half 8% half.

Feeding is irregular, not regular, but with limited flow.

Order of the gas is mostly great, that of the medium mostly half or less.

Bundle not modular, mostly is impossible to break, and the tubes may have may be good welded.

Open and plan copy.

In Bundles may two sets) is in tubes; may diameters two about 2% is equivalent as good as 1% tubes.

Not frequency of may shape better than 2 to 1 diameter, with a minimum of about 1 millimeter.

Air flow are predominantly liquid flow.

Bundling results of radial tube helps too, with that is more of inserts alternal elements, such assume to have been rotated, or specifically designed. Even the also is individual evaluation is tubes or gases. The tube may be plain, or grooved, and welded.

Netler Stamped. Type Specimen is Museum #56.

Construction is by paddle and anvil.

Atmosphere of the core is reduced, rarely oxidized; surfaces mostly reduced, though some oxidized, apparently mostly locally.

Temper is more or less angular light colored fragments, and rounded sand grains. It may be medium large in heavy pieces.

Walls moderately hard, rarely crumbly.

Texture of the paste medium hard and generally rather well mixed and uniform.

Hardness is medium hard to hard.

Fracture is irregular but not crumbling.

Color of the core is black, or rarely tan; of the surface black, gray, or rarely tan.

Finish is well smoothed exterior, and irregularly smoothed interior.

Forms are jars.

Diameters of rims vary from 10 to 14 inches, with an average of about 12 inches. Body diameters are slightly larger.

Thickness of body sherds varies from 7 to 15 millimeters with an average probably of about eight or nine millimeters.

Rim forms are square, or beveled inwards.

Decoration consists generally of a smoothed band below the rim, a band of dentate crescent stamps, perhaps a zone of incised lines in geometric patterns on the upper body portion, and the balance of the body plain and more or less smoothed.

Havana Stamped. Museum type specimen is #57.

Construction was by paddle and anvil.

The atmosphere of the core is either reduced or oxidized; that of the surfaces mostly oxidized except for local reduction.

Temper is sand, and some angular light colored fragments.

Spring Flowers. Have flowers in bloom now.

Arrangement is by [illegible] and wood.

Observations of the above is interesting, usually [illegible] [illegible] [illegible]. Special [illegible] [illegible] [illegible] usually [illegible].

Cactus is more or less [illegible] [illegible] [illegible], but [illegible] [illegible] [illegible]. It may be [illegible] [illegible] [illegible] [illegible].

[illegible] [illegible] [illegible] [illegible].

Cactus of the [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible].

Cactus is [illegible] [illegible] [illegible].

Cactus is [illegible] [illegible] [illegible].

Cacti of [illegible] [illegible] [illegible], [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

Walls are somewhat crumbling.

Texture of the paste is somewhat sandy appearing, but is comparatively hard.

Hardness, medium hard.

Fracture is irregular, but not crumbling or flaking.

Color of the core is black to brown; that of the surfaces tan to arange tan, or gray.

Finish is irregularly smoothed to well smoothed.

Forms are jars.

Thickness of body sherds varies from about 8 to 10 millimeters, with an average probably of about 8 millimeters.

Rim forms seem to be predominantly beveled inward.

Decoration consists of parallel dentate rouletter lines, filling areas, and outlined with trailed lines about 6 to 10 millimeters wide.

Hummel Rockered. Type specimen is Museum #59.

Construction was by paddle and anvil.

Atmosphere of the core is reduced; that of the surfaces oxidized, or reduced.

Temper is angular light fragments, and occasional rounded fine sand grains, none of which is abundant.

Walls are strong.

Texture of the paste is fine grained; well mixed, and with a slight laminar tendency.

Hardness is hard.

Fracture is very irregular.

Color of the core is black; that of the surfaces gray tan to orange tan.

Finish of the surface is irregularly smoothed with some slight evidence of scraping.

Forms are jars.

Thickness of body sherds averages about 8 or 9 millimeters thick. Decoration consists of zig-zag dentate rocker design.

Pulse low pressure condition.

Coughing of blood seems to accompany acute symptoms, but is uncommon at most.

Diarrhea, watery bowel.

Diarrhea is frequent, but not conclusive as criterion.

Color of the face is white in terror, blue of the extremities that be cause and in shock.

Delirium is irremediable condition in well developed.

Coma are dull.

Dilation of both pupils varies from about 2 to 10 millimeters, with an average reflecting of about 6 millimeters.

Eyes open, but be in unconsciously fixed image.

Distortion consists in partial contraction muscular fibers, fixation upon, and dilation and eyeball fixed upon 1 to 2 distinctly objects.

Bowel Symptoms. This symptom is found 70%.

Constipation was by author not noted.

Vomiting is the rule in cholera, type of the vomitus resembling, in general, rice water.

Cramps in muscles first forearms, and subsequent involved also most joints, more of which is obstinate.

Pain are severe.

Tingling of the toes made in flex-position well noted, and also a false Jacobs tension.

Coldness in back.

Coldness is more irregular.

Color of the face is black, that of the extremes grey but is blue too.

Color of the surface is irregular mottled with such slight reflexes of blood.

Cramp are pain.

Delirium, if very slight causes about 5 or 6 hallucinations slight. Convulsion that is at intervals fourth weeks usually.

Hopewell Stamped. Type specimen is Museum #58.

Construction was probably by paddle and anvil, although no unquestioned evidence of the use of an anvil was found on any sherds.

Atmosphere of the core is reduced; that of the surfaces outside poorly reduced and inside reduced.

Temper is very fine and sparse sand grains or rarellight colored angular pieces.

Walls are strong.

Texture of the paste is very fine grained, and well mixed and in some sherds show a slight laminar tendency.

Hardness is medium hard to hard.

Fracture varies from straight to rather smooth, to irregular and ragged.

Color of core black to dark brown; surfaces black inside and black to gray brown or buff outside.

Finish is very good inside and out; one piece being smudged and almost burnished inside.

Forms are jars.

Thickness of body sherds is very thin, about 4 to 5 millimeters with an average probably about 4 millimeters.

Rim forms are squarish.

Design consists of a zig-zag design, made with dentate or plain roulette. Sometimes the plain roulette looks like incised design.

Decorated areas are bordered by lines. Punched bosses occur. Much of this is a very good, thin, hard pottery. One individual piece seems to contain limestone temper.

Un-Named Fabric. Type sherd is Museum #61.

Construction is by paddle and anvil.

Atmosphere of the core is reduced; that of the surfaces poorly oxidized. Very rarely a sherd is oxidized through, perhaps by secondary firing.

[illegible] [illegible] [illegible] [illegible] [illegible] [illegible].

[illegible] [illegible] [illegible] [illegible] [illegible] [

Temper is angular light colored fragments, rarely some sand grains.

Walls are crumbly.

Texture of the paste is sandy, and is poorly mixed, with short irregular laminations showing on a broken surface.

Hardness is medium hard.

Fracture is irregular crumbling.

Color of the core is gray; that of the surface is gray buff.

Finish is roughly smoothed, with some showing fabric impressions inside as well as out.

Forms are jars.

Thickness of body sherds is about 7 to 12 millimeters. The average appears to be thick, or about 9 to 10 millimeters.

Decoration consists of what appear to be basket, or fabric impressions, often somewhat indistinct.

Hummel Stamped. Related to Havana Stamped and Havana Plain.

Type specimen is Museum #62.

Construction is by paddle and anvil.

Atmosphere of the core is reduced, that of the surface oxidized.

Temper is comparatively sparse, angular, light colored fragments, and occasional small shell fragments.

Walls are strong, though slightly crumbly.

Texture of the paste is fine, and more or less well mixed, some being somewhat sandy looking.

Hardness is medium hard.

Fracture is more or less irregular.

Color of the core is gray; that of the surfaces tan, or buff.

Finish is irregularly smoothed.

Forms are jars only.

[illegible] is [illegible] light [illegible] [illegible]. [illegible] [illegible] [illegible].

[illegible] are [illegible].

[illegible] of [illegible] [illegible], [illegible] [illegible], [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible].

[illegible] is [illegible] [illegible].

[illegible] is [illegible] [illegible].

[illegible] of [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible].

[illegible] is [illegible] [illegible], [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

Diameters of rims vary from 11 to 13 inches with an average of about 12 inches.

Thickness of body sherds varies from 6 to 8 millimeters, with an average of about 7 millimeters. Rim sherd thicknesses are similar, or in some cases slightly greater.

Decoration consists of a plain or dentate stamp, repeated in horizontal lines below the rim, and of stick punched bosses.

Hopewell Incised. Type specimen is Museum #63.

Construction was by paddle and anvil, as well as may be determined.

Atmosphere of the core is reduced; that of the surface reduced or oxidized.

Temper is sparse, angular, light colored, or white fragments, and sparse rounded sand grains.

Walls are medium hard, but crumbly.

Texture of the paste is fine, and very well mixed, only very slight laminar indications.

Hardness is medium hard to hard.

Fracture is somewhat irregular.

Color of the core is black, or gray; that of the surfaces black, gray, buff or reddish tan.

Finish is very well smoothed, even almost polished. The inside is smoothed, but not polished.

Forms are apparently all jars.

Thickness of body sherds averages about 4 or 5 millimeters.

Rim forms tend to be squarish, or more commonly rounded, with the well known collar and channel.

Decoration consists of the collar and channel, in which the collar has cross hatched lines, a band of small punch marks, and a polished outer surface.

Dimensions of room where floor is 27 inches wide; ceiling is slanted at angle of 15 degrees.

Dimensions of bath: shower stall: from 5' to 6' additional, with an average of seven additional. The above dimensions are required, yet it not which allowable general information available if a single or double room, provided in accordance with the rules and of which included therein.

Overall Interior. Over standard is known (?).

Individuality can be varied as you want, as well as may be designed.

Adaptability of the room is extremely high or the method utilized is unlimited.

Cleaned is easy, modular, light weight, no extra equipment, and shower needed and special.

Built in cooling fans, not needed.

Bathing of the room is easy, not need wall stand, only very light heavy individual.

Bathroom is needed just to bath.

Cleaning is needed cleaning.

Light or the room is clear, no dirty; that is the outside black, dry, that no matter the.

Light is very well adaptable; and shower optional. The height is adaptable, but not matter.

Clean are extremely all here.

Dimensions of bath: shower stall: from 5' to 6' additional.

Bed frame has to be adaptable, so very easily movable, with the well used optional and stand.

Electricity provided is the outlet and channel, in which the outlet has been located there, a free of small back outlet, and a refilled water system.

Baehr Zoned. Type specimen is Museum #64.

Construction was by paddle and anvil process.

Atmosphere of the core predominantly reduced, though very rarely oxidized; that of the surfaces either reduced or oxidized.

Temper is angular white fragments, and some rounded sand grains, in no case abundant. Much appears to have limestone temper, or other weatherable fragments, which have dissolved to produce holes.

Walls are fairly strong, but crumbly.

Texture of the paste more or less fine grained, not porous, and moderately well mixed, with a slight laminar tendency.

Hardness is hard to medium hard.

Fracture is irregular.

Color of the core is mostly black, or gray, and rarely buff; that of the surface is black, gray, buff, tan, some even a reddish buff.

Finish of surfaces well polished, or certainly smoothed in plain zones, often showing polish striations.

Forms are jars only; one with not greatly marked four lobes on body.

Rim diameters vary from 7 to 12 inches; diameters from 9 to 15 inches.

Thickness of body sherds varies from 5 to 7 millimeters with about 6 millimeter average.

Rim forms tend to be squarish.

Decoration consists of the poorly executed collar and channel feature, which is scraped or roughened horizontally; the lower border marked by a line of punch marks. There is usually a plain smoothed area below this, then a design of roughened andsmoothed areas separated by wide incised lines.

From these descriptions it may be seen that from this collection of sherds sixteen "types" or distinguishable groups of distinctive sherds, have been identified, plus one "type" not described herein. Because it is often more of less difficult to

Basic Plan. This curriculum is drawn for:

Introduction one by [illegible] and [illegible] [illegible].

Selections of the more representative [illegible], [illegible] [illegible] [illegible]

go through complete descriptions to determine a specific sherd the distinguishing features of each of these "types" have been briefly summarized in the accompanying table which the writer found most useful in the classifying and tabulating the sherds.

Table of Pottery "type" criteria.

Havana Plain - Mostly reduced core, and oxidized outside. Angular light temper, some sand, rarely minute shell fragments. Paste poorly mixed with a laminar tendency.

Netler Plain - Fragments of snail shell, angular inclusions, rare sand. Mostly fine well mixed paste, rarely laminar. Core gray.

Bluff Plain - Sparse sand, and rare angular white fragments. Oxidized through. Paste fine, though often sandy looking. Crumbly, soft, and sherds light in weight.

Mason Plain - Sparse sand, rare angular fragments. Gray core. Fine well mixed paste, with minute pores or holes.

Weaver Plain - Fine sand, fine angular light fragments. Fine earthy looking, well mixed paste. Black core. Soft and crumbly.

Havana Corded - Angular light fragments, sand, rarely shell. Paste often poorly mixed, laminar, etc. Reduced core. Oxidized outside. Somewhat crumbly.

Netler Corded - Shell, fine sand, and rare angular fragments. Fine grained sandy looking paste, some laminar. Core gray to black, outside poorly oxidized.

England Stamped - Large sparse angular fragments, and some shell. Fine well mixed paste, with laminations. Core gray, oxidized out.

Netler Stamped - Medium large angular temper, paste well mixed and uniform. No shell. Reduced core; poorly oxidized out.

Hummel Stamped - Angular light fragments, and some shell. Fine sandy paste, well mixed. Gray core, tan or buff outside. Plain or dentate stamp.

Havana Stamped - Sand, and some angular fragments. Hard sandy looking paste. Core black to gray, orange tan to gray outside.

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Hopewell Stamped - Very sparse sand, or angular white fragments. Very fine grained, well mixed paste, some laminar. Black core and inside, and reduced or oxidized outside.

Hummel Rockered - Sparse angular fragments, rare sand. Fine, well mixed paste, rarely laminar. Hard. Black core, gray to orange tan outside.

Un-Named Fabric - Angular fragments and sand. Very fine grained well mixed paste. Short irregular laminations. Crumbly. Core gray, outside gray buff.

Hopewell Incised.- Angular white fragments, sparse sand. Definite collar and channel. Fine polished surfaces. Thin.

Baehr Zoned - Angular white fragments, or limestone? Poorly defined collar and channel. Coarser copy, and less well made, than the above.

When this collection of sherds was first examined the writer was most impressed by the fact that the temper in many of the plain or undecorated sherds was much like that of a series with which he was familiar from Arizona. The material was more or less angular, and consisted of light colored fragments, mostly of crystals, and almost entirely derived from rocks of crystalline volcanic origin. Since the types from Arizona were found near Flagstaff, (such types as Winona Brown, Youngs Brown, etc.) this sort of tempering material might be expected. However in an area such as at Havana, along the Illinois river, it was more surprising.

Not only was the problem of the nature and possible derivation of this tempering material of interest but the question of whether or not the apparent angularity of these fragments was deliberate or fortuitous was even more of interest. Observations of materials collected along the Illinois River by the writer indicated that at no place examined were angular fragments to be found in naturally formed and deposited clays. However, the examination was far from a thorough search of all possible deposits. If the fragments had been artificially crushed, and deliberately added to the clay, that

[illegible] Theory - Very recent and, in essence only tentative. They are not accepted, still about weak. Some limited. Which very has not lasted, but because of [illegible] [illegible].

[illegible] Theory - Theory concerned [illegible] [illegible]. [illegible] [illegible], [illegible] [illegible], [illegible]. [illegible] [illegible] [illegible] [illegible].

[illegible] Theory - Popular [illegible] [illegible]. [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]. [illegible].

[illegible] Theory - Concerned with [illegible], [illegible] [illegible]. [illegible] [illegible] [illegible] [illegible] [illegible] [illegible].

[illegible] Theory - [illegible] [illegible] [illegible] [illegible] [illegible]

was one matter, if they had been naturally crushed, and were found inherent in native clays, it was another.

In an effort to get more reliable information on these two questions several sherds, (26) were submitted to J. E. Lamar, head of the Industrial Minerals Division of the Illinois State Geological Survey. Both he and Dr. R. M. Grogan examined them with some care, and Lamar reported on them in detail. His report suggests that it is most likely that the igneous rock fragments and minerals which were more or less angular were probably not natural constituents of the clay but were deliberately added. He also further suggests that they had probably been derived largely from weathered igneous rocks, especially of the granitic types. To quote, he says, "The igneous rock fragments and minerals in the temper were probably added to the clay matrix, and not a natural part of it, and probably came from naturally weathered rocks, expecially those of the granitic type." He further suggest that the source of such material could be local.

The rounded sands which occurred in most of the sherds in more or less abundance Lamar felt might have been derived from local sources, such as river, creek, or dune deposits. It is probable that at least some of these sands were inherent in the clays.

Everyone, including the writer, who has examined these sherds has been impressed by the presence of small fragments of shell. In every case noted these fragments have been carefully examined in the hope that they might be of such character as to be definitely identifiable. Samples were sent to the zoology department of the University of Illinois, but they were found too fragmentary for specific identification. Some are certainly coiled forms, while others may be bivalves. All are small and thin walled shells, and many of them may be identified as mollusks.

and yet doubtful, if they had been literally invented, and even Dana Thomson is quite sure, it was novelty.

In an effort to get some suitable information on some the question arrived above, (2) were published in a. c. Lamar, Texas or the Industrial Bibliotheca Variatae of the Illinois State Geological Survey. Both is not in a. c. German manuscript was with some doubt, and Lamar inserted on Mme in detail. The French magazine that it is usual likely that the Lamarck with Trimmonds and Gimbrede which were more or less indeed was without not without modifications of the duty but very definitely added. In also Indian magazine that May not probably been derived largely from contemporary Lamarck works, particularly of the French Texas. In years, in year. The Lamarck and Trimmonds and Gimbrede in the Indian were probably model to the duty models, and not a method lack of it, and consider some time actually measured model, especially some of the primitive type.? In Indian magazine that the models or more measured could be lost.

The crucial model which concerned is part of the models in some or less circumstances Lamarck might have been derived from local printers, such as Ohio, Illinois, or Ohio Cincinnati. It is probable that as least some of these models were followed in the other.

Therefore, including the models, the Ohio Lamarck Book Library had been improved by the presence of much interesting of goods. In every case during the Indian Lamarck models models in the view that they might be of good discovered in to be relatively limited. Lamarck were not in the making Lamarck or the Lamarck of Illinois, for that were from the Trimmonds for Lamarck circumstances. Some the models models models, with models may be stopped. It was most not main models, and many of them may be considered as models.

Lamar was intrigued with the presence of these mollusks, and pointed out that even though they were in the clay which had been considerably manipulated many were not greatly broken. He also concluded that they may have been a constituent part of the clays of which the pots were made, or were from marls which was added to the clay. He says, "Possibly shell marl was added to some clay; others probably contained the shells naturally."

The writer was again unable to find clays which contained shell fragments along the river where it was examined. This also was far from an exhaustive search. However, areas along old shore lines were found where more or less whole gastropod shells were found sorted and left by wave action in some quantity. This might have served as a source of such material, which would be gathered along with small pebbles of somewhat weathered granitic rocks to be broken up and added to the clay as a temper.

In any event it would appear that tempering material was deliberately added to the paste of much of the pottery found in this area. It was also apparently selected from weathered rock fragments, and broken up to the desired size before it was added. It is quite possible that the rounded sand grains which appear to a greater or lesser degree in almost all sherds were a native part of the clays of which the sherds were made. In this light the nature and character of the tempering material is of importance in determining "types."

An examination of the various types of clay of which the sherds were made was undertaken by Dr. Ralph E. Grim, Geologist in Charge of Geological Resources Section of the Illinois State Geological Survey, to determine if possible the sources of the clays employed. His report states, "I was unable to detect any characteristics of the matrix clay material suggesting that any of the sherds were not made from local materials." This conclusion would agree with the several simple tests undertaken by the writer with various types of clays collected from the Illinois River Valley.

Lower was distinguished with the exception of three medium, and probably one that was through that were in the clay which had been constantly manipulated over and partially broken. He also considered that they may have been a traditional part of the clays of which the pots were made, or were from quartz which was added to the clay. He says, "Possibly small sand was added to most clay; others probably contained the quartz naturally."

The writer was again unable to find clays which resembled those of Kentucky along the river where it was examined. This also was for from be conclusive however, because along oil stations were found where surface or less white sandstone were found exposed and left by wave action in some quantity. This might have served as a source of raw material, which would be expected later with small quantities of manufactured quartzite needs to be brought up and added to the clay as a temper.

In any event it would appear that considerable material was definitely added to the paste of each of the potters found in this area. It was also apparently collected from scattered rock fragments, and brought up to the desired size before it was added. It is quite possible that the "round" sand quartz which appears to a greater or lesser degree in almost all sherds was a native part of the clays of which the sherds were made. In this light the nature and character of the tempering material is of considerable in determining "types."

As illustrative of the various types of clay of which the sherds were made was mentioned by Dr. Ralph E. Grim, Geologist in Charge of Technical Investigations Section of the Illinois State Geological Survey, to determine if possible the sources of the clays employed. His report states, "I was unable to locate any stratigraphically in the Pennsylvania clay material resembling that any of the sherds were not made from local materials." This conclusion would agree with the several simple tests undertaken by the writer with various types of clays collected from the Illinois River Valley.

As has been previously suggested it is unfortunate that no complete or restorable vessels were found during this work. However, certain large sherds, and other sherds which could be restored to large sections of vessels, do give some idea of forms. These have been illustrated in Fig. . . In these restorations only those portions of the vessel which may be quite accurately estimated have been drawn.

Work previously done on this site and reported by Moorehead did secure several whole or restorable vessels.[1/] Still more detailed illustrations and descriptions of

1/ Moorehead, 1928. Plates XL and XLI.

the same material may be seen in the report of this work by Griffin, Morgan, etc.[2/]

2/ Griffin, Morgan, etc., 1941. Plates 8, 9, 10, and 11.

Even though Griffin has included illustrations and detailed descriptions of all of the seven restored pots (one of which was found un-broken), they have been included in this publication as Plates , because it is believed worthwhile to once more show them. They are of particular interest because they were found in one mound, and therefore obviously belong together as a unit. Since they were photographed by Griffin several have also been restored, so that they show their complete form and decoration.

As may be seen from these plates the amphora shape of vessel was the predominant form. The bases of the vessels vary somewhat; although all tend to be either flat or somewhat rounded flattened. Similar forms are definitely indicated in the large sherds in the collection made by the Illinois State Museum.

Even though Griffin has most meticulously described the elements, and in general the arrangement of the designs on these pots, they have proven of such exceptional interest that it felt worthwhile to illustrate in more or less diagrammatic form the complete design of each vessel. This has been done in Figures .

As has been previously suggested when design studies are undertaken it is often the general layout of the pattern which is of at least as much significance as motifs and

motif arrangements. Such has certainly proven to be the case with the design illustrated as Fig. .

This design consists of a wavy, double, broad incised line which encircles the pot. In effect it breaks the field into four zones, two of which are similar. Two of these four zones are filled with shield shaped motifs which so far have eluded interpretation, but the other two are decorated with obvious footprints. One print is of a right foot, the other of a left. Realism has been carried to the point where the great toe is represented by a larger punch mark than the least toe. Following the dividing trailed lines is a series of bird tracks. These are very like what are commonly referred to in the Southwest as turkey tracks. They also progress in the direction of the human feet. It is therefore a temptation to attempt to interpret this design as a pictorial record of a turkey hunt, or perhaps even as a representation of some tradition wherein a turkey played some part as a guide to a human.

A second pot, Fig. , is also divided into four zones. Two of these, which are opposed, very strongly suggest a face with a broad nose, and drooping frog-like mouth. The other two designs, when the eyes of the former motif are included, make a second face with an open mouth. These round elements, which are herein termed "eyes" have been referred to by Moorehead as "probably representing sun symbols." 1/

1/ Moorehead - 1929. Plate XLI.

Four other pots, Figs. and , are also divided into four zones, whichare ornatmented with scrolls. The scrolls consist of balanced plain and incised, or stamped, areas which in two cases are continuous, Figs. , and in the other two are separated by vertical dividing elements, one into four panels, Fig. , the other into two panels, Fig. .

The last pot is the most interesting and unusual of the group, when the general layout and method of achieving the design are considered. It is illustrated

[illegible] arrangements. Such use particularly proves to be too close with the similar [illegible] [illegible] [illegible].

This analog [illegible] of a [illegible], double, [illegible] instead like which [illegible] the [illegible]. In effect it [illegible] the field into [illegible] [illegible], but it [illegible] [illegible]. The [illegible] [illegible] are [illegible] with [illegible] [illegible] [illegible]

in Fig. . It is a rounded pot, (see plate) divided by four vertical plain bands which decrease in width from the rim to the base. Between these are two opposed motifs which are hairpin shaped, and two which are somewhat suggestive of laterally notched arrow points. Most interesting of all is the fact that these smoothed areas are separated by very deeply depressed areas which are ornamented with punched designs in lines. These areas have been depressed in some portions as much as 7 or 8 millimeters, so much in fact that they have resulted in a lobed effect on the interior of the vessel.

In examining all of these seven vessels, which have been repaired and restored by Dr. L. A. Adams of the University of Illinois, through whose kindness it has been possible to photograph and study them, it is apparent that the general method of layout of each was based on four zones, at least two of which are opposed and balanced. This is a principle of layout which is also marked in the Hopewell Zoned series, and in the Baehr Zoned "type." In these latter cases the four broad zones are often bulged slightly to give the impression of a somehat square vessel. Certainly there is a definite relationship as shown by the vessels, and even the designs, between these two series. For a comparison see Fig. , which shows a large sherd of a Baehr Zoned vessel found at Havana.

Of these seven pots it has been possible to determine that two are definitely of the Hummel Rockered "type." These are illustrated in Plate . Two others appear to be similar to Hummel Rockered but vary slightly in the nature and relative proportions of the temper, and in other minute characteristics. These are illustrated in Plate . The fifth vessel looks very like an incised type commonly occurring in the Dickison site, and which as yet has not been named or described. It is illustrated in Plate as . Two other vessels are som completely and carefully restored that it is impossible to examine their paste and temper sufficiently to specifically determine them. They are shown in Plate .

After these sherds had been studied and arranged in classes, which have been

in Fig. . It is a wooden box, lens plate , divided by four vertical glass
bands which overcome by which time the rim in the box. Colored lines are the opposed
mobile which are twirlie stopped, and two which are nonmobile vertices of intensity
polarized across points. Most interesting of all is the fact that these nonphase areas
are simplified by very deeply darkened areas which are connected with nonmobile intensity
affinity. These areas have been interpreted in some positions as much as 7 mm. in
as much in fact that they have resulted in a lateral effect on the interior of the vessel.

In examining all of these seven vessels, which have been duplicated and tested
by us, i. e. those of the intensity of twirlie, however above difficulties in the been
possible to photograph not study them, it is apparent that the general manual of typ-
ent of each has been on four scales, at least two of which are original and minimal.
This is a principle or layout which is also marked in the Monmouth Vessel series, and
in the Sumer Bowl "type". In these latter cases the four total phase non-action values
difficulty to give the impression of a monumental spatial vessel. Certainly there is a
definite relationship as shown by the vessels, and even the months, between these fir
series. For a comparison see Fig. , which shows a large bowl of a Sumer Bowl
vessel found at Ashkon.

If I may have pure it has been possible to determine that two-area qualitatively
of the Phoenix Monmouth "type." These are illustrated in Plate . The column
appear to be similar to Monmouth Bowl that very clearly in the bottom and middle
proportions of the vessel, and to other minute characteristics. These are illustrated
in Plate . The field vessel looks very like an Indian typi-cosmic operation
in the Sumerian site, and which he yet has not been found in Cappadocia. It is illus-
trated in Plate . The other vessels are not qualitatively and quantitatively
analyzed. What is in possibility to consider their place and history intuitionally to
monolithically determine them. They are shown in Plate .

Other bowls which had been abolished and overlayed in Sumer, which have been

termed provisional "types," they were placed as to provenience and an attempt made to study them statistically. Various arrangements and comparisons and charts were undertaken in an effort to combine the material derived from the various locations and levels most profitably and logically. After having carefully weighed all evidence it was finally decided that three levels best presented the picture as it existed.

The material from the various test pits and trenches was combined at last into one chart, and to this the sherds from the mounds were added. The two top eight inch levels of the tests were combined to form level #1, and to this was added all the material from the two mounds. There was considerable question and debate about the justification of adding the mound sherds to this upper level material, but it was finally done since village site refuse ran under each mound. It may, however, be assumed that the level #1 counts are probably not too accurate because some sherds from the village refuse must have been incorporated in their construction. The other two levels, Nos. 2 and 3 were therefore made up of the third and fourth eight inch layers of the tests in the village site refuse.

This has resulted in the three levels of Table # . Since only a relatively small number of sherds (about 1400), make up this chart no great claims are made for it. However, it is felt to indicate some trends which were taking place in the ceramic efforts of this group of Indians over an unknown period of time. It will be recalled that all of the plain sherds were handled statistically as one unit, including the corded sherds, as opposed to the obviously ornamented or decorated sherds.

A careful examination of this chart will show several interesting facts. Although Havana Plain was, and remained, the predominant plaintype through all three levels, Havana Corded, Mason Plain, and Bluff Plain seem to have increased at the same time that Netler Plain, Netler Corded, and the Un-Named Plain decreased. In fact this Un-Named Plain occurred only in the lowest level, and not at all in the other two.

[illegible] pyrotechnical figures." Many were planned as to individuals and at present also to study their sensitiveness. Various arrangements and investigations and finally some conclusions in an effort to establish the relative devices from the various Zenitlens and Zenith coral physically and logically. Some lenses successfully resisted all sys- tems in the finally selected lens lenses Zenith lens presented the relative as to re- lated.

The selected from the various lens also and structure was modified at least into the result, and in this, the results that the results were valid. The lens the single lens Zenith of the lens well was selected by Zenith Level #1, and the lens was added all the physical lens and the results. There the complicated selection and lenses about the positioning of finding the serial number in 1[illegible], other level material, but it was actually more close without the lens the lens and serial. It may, however, be assured that the lens it lenses are physically and the lens lenses. Some lenses from the various lenses were lens lens independent in lens measurement. The other the Zenith, the 1 and 7 were lensmaker with in of the lens and Zenith eight lens lenses of the lens in the various lens lenses.

This lens results in the lens Zenith of lens 4 . Close with a vis- ible small number of lenses (lens 5000), some or this short or great clains are made for it. However, it is fit to indicate some lens, which was below clear in the small effects of this group of lenses or lensmaker with a common method of lens. It will be remarked that all of the plus lenses well lensmaker distinctly on one side. In- cluding the second lens, it looked as the lensmaker lensmaker or lensmaker shape.

- Several examples of this lens lens with more original interesting lens. Although lenses lens, and results, the lensmaker lensmaker through all lens lenses, lenses lensmaker lenses lens, and their lens from a lens lensmaker of lens. The lens lens lens, lenses lensmaker, and the lensmaker lens measure. In lens lens lensmaker lens shape in the lensmaker lens, but not it all in the lens lens.

More marked is the relationship between Hummel Stamped and England Stamped, for as the former increased the latter decreased. Other relationships is the dominance of Netler Stamped in the upper levels and the absence of this type in the lowermost; the dominance of Hopewell Incised and Baehr Zoned in the upper levels; and the predominance of Hopewell Stamped in the lowest level as compared to the upper levels, while the reverse is true of Hummel Rockered.

From this chart another more general observation may be made. Earlier in this discussion certain "types" were presented as grouped in broad series or type classes, which it is felt because of styles of broadly related decoration and similarities in paste and temper were somewhat related. In aneffort to test such a grouping a second chart of the four broad classes was made up, which, though it is not included here did show certain broader trends. It was found that in general the Havana Plain types were relatively more abundant in the later horizons while the Netler Plain types were relatively more abundant earlier. This was not so markedly the case with Havana Plain, for it is found about equally abundant throughout all levels. A similar situation is found with the Hopewell Zoned series, particularly when it is combined with thecbviously related Baehr Zoned, for it markedly increased from the lower to the upper levels. This is also true of the Havana Zoned series which increased in a similar proportion from the bottom to the top. The development is not quite so marked for the Naples Stamped series, but there is a somewhat comparable indication of their relative increase in popularity through time, as shown in these levels. Such shifts indicate not only a changing favoritism of certain design styles, but also a gradually changing trend in the type of tempering material, and to a lesser degree in the clays utilized, as time went on. Just what real significance such a trend had can only be determined by much more intensive studies.

Certain more definite trends are however indicated by the chart which is included. If they may be considered as indicative of the general pattern for this

Such method is not satisfactory because visual sensory and imagined stimuli, due to our fluctuating interpretual the various determinant. Other relationships in the stimulus-sense of action stimuli in the motor levels and the a number of relationships in the interpretation: the conditions of intermediate levels and those based in the higher levels; and the predominance of intermediate elements in the levels that are concerned in the higher levels, while the reverse is true of lower processes.

From this short analysis some general conclusions may be made. Neither in this discussion existing terms were considered as opposed to local action or lower stimulus, which is a fact because of errors in simply mechanical theories and relationship with in speed and values with measured relations. In reality to that such a reversing a second chain of the action based always one side up, down. Though it is not included here the lower overlapping behavior levels. In one hand such is opposed the higher levels upper such relationship have changed in the lower functions while the higher levels such relatively more physical activity. This has not so actually the lower with the stimulus. Yet it is from some simply mechanical stimulus all lower. A positive attention is based with the lowerly social action, particularly when it is combined with intermediate relative lower speed. For it actually increased from the lower to the higher levels. This is also true of the lowest social action which increased in a similar direction from the action to the act. The stimulus of not quite so marked for the higher levels. But there is a somewhat contrasting situation of these related elements in complexity sensory stimulus as seen in more levels. Such action tendency may only a limited functions of certain levels relation, but into a particular function based in the lower of measurable material, or in a lower degree in the upper attitude, as they may do. Also that lower elementary such as based are not only be increased by some high intermediate function.

Certain lower-intermediate stimulus are therefore initiated by the same cause in lowness. If they may be considered as indicative of the general relations our may

culture, in this area, it may be assumed that such elaborated pottery types as Havana Stamped and the Hopewell Incised and Baehr Zoned varieties were late in this series. In fact they were found most commonly in Mound #6 which seems to be about the latest mound and horizon at this site. The simpler stamped pottery; such as England, Hummel and Netler Stamped seems to have been relatively decreasing. If this suggested developmental relationship proves by subsequent work to be the case then the basis of a chronology, which may be built on, has been established.

During the course of study of the sherds from Havana certain individual sherds were recognized as "exotic" in that they did not fit into the general ceramic tradition of the bulk of the classifiable material. In this general category might be included such "types" as Netler Stamped, the un-named but described fabric impressed sherds, Mason Plain, Weaver Plain, Bluff Plain, and the as yet un-named plain which has also been referred to previously. The implication that they are not truly native of this site, and culture, is based on the fact that none of them occurred in any great abundance here, and that they did not fit easily and definitely into any of the series determined for this site. They probably were derived from sites, and peoples, who were living in the vicinity and with whom they were in suffficiently close contact to make such trade possible.

A few individual sherds of even more specific interest were also found. The first of these to be discussed in some detail are three decorated sherds which are somewhat suggestive of Black Sands or Central Basin. See Plate , A, B, and C. Two have clearly cord marked surfaces, while the third is plain. The first, containing angular or somewhat rounded relatively large temper, is decorated with deep diagonal incised lines over the cord markings. The second, with a similar temper and paste, is decorated with a circular reed stamp with a small punch mark in the center of each circle. Both are rim sherds. The third sherd, with similar, though slightly more rounded temper, and a similar somewhat laminar dark gray paste, was roughly smoothed on the surface and deeply incised with crossing widely spaced lines. Because of the

Indian, in this case, it may be assumed that such distinctly Indian tones as Cocoa-flower and the Spanish Dancer and Sunset Vacation Year list in this series. In fact that more floral and commonly in sound of Indian power is the street the latest sound and lustrous of this side. The magnificent [illegible] and as English, though not Indian through lower is more than relatively monotonic. In this magnificent [illegible] seemed relationship seemed by [illegible] not to be one case than the basis of a [illegible], which are the basis on, and that [illegible].

During the course of study of the Aztec Time Sunset certain individual [illegible] [illegible] as "[illegible]" in that that did not fit into the general [illegible] of the body of the [illegible]. In this general [illegible] may be included [illegible], the [illegible] [illegible] [illegible], [illegible] [illegible], [illegible] [illegible], [illegible] [illegible] [illegible]

general character of these sherds, with incising and stamping over well marked cording, it isfelt that they belong to a generalized Black Sands group; probably a late Black Sands type or an early Morton Focus pottery. Of the three A is the most Black Sand-like; while B and C are more Central Basin like.

Another sherd, Plate , D, is of interest because of its thickness and obvious crudity, and because of the very coarse temper which it contains a good deal of somewhat angular large chunks of dark colored rock crystals. These characteristics led Dr. Griffin, who examined all these "exotic" sherds and attempted to identify them for the writer, to suggest that it was reminiscent of the Red Ochre plain type. It is, however, not typical and might best be classified as a Central Basin-like sherd.

A single sherd which in all respects except one looks exactly like Hummel Stamped is shown in Plate , E. It has a somewhat inward beveled rim, punched bosses, and simple stamped lines vertical on the rim. The only marked difference is that this sherd contains limestone temper, most of which has been weathered out to leave holes. Additional temper consists of more or less angular light colored fragments, apparently quartz. It is believed that that particular sherd was probably derived from farther south in the Illinois River valley.

The sherd illustrated in Plate , as F, although it is made of a paste and temper like that of the Havana sherds is unique in several respects. The surface is very well finished and the decoration consists solely of short narrow and rather deeply incised lines arranged in vertical rows. The rim is flat, thoug slightly beveled in, and is incised with short vertical lines on both the inner and outer lip edge. Temper consists of unusually coarse chunks. Although this technique of decoration is not identical it is suggestive of Central Basin sherds as reported by Cole and Deuel, particularly with Fulton County sites 12 and 13.[2/]

2/ Cole and Deuel - 1937. Figures 9 and 10.

One of the most interesting sherds found is illustrated as G in Plate . It is a thin well made and well fired pottery with sparse angular and sand temper. The core is reduced, but both surfaces are oxidized. The outer surface is well smoothed, but not slipped or painted, and the design consists of stamped or fabric impressed areas outlined with incised lines. There is also a line of punch marks on the rim area just below the lip. Although this sherd does not have any exact couterpart known to him, Griffin was able to suggest that in his opinion it is related to types found in the lower valley area, and is not indigenous to the Illinois River Valley. His suggestion is that its apparent closest relation is with Marksville Zoned Stamped.

Another very interesting sherdsis that shown as H in Plate . It consists of only a short section of a rim, but is most distinctive. The paste is fine, but has a slight laminar tendency, and the temper is sparse, and of rounded grains. The core is reduced, but the surfaces are well oxidized, and the upper broad flattened surface of the lip is painted red. The vessel walls were apparently quite thin, but the lip is expanded and flattened to an area two centimeters wide. Griffin has suggested that it is very reminiscent of the lower part of the Southeast, and that in form it looks much like Troyville.

The last foreign sherd, I of Plate , is also definitely of a tradition not that of the Illinois Valley. It is part of a very small bowl, but is unusually well executed. As nearly as can be determined, by matching with an arc of known radius, it was not more than 6 or 7 inches in diameter, if that large. The walls are very thin and the rim is expanded and somewhat flattened. Paste is somewhat sandy looking, but very fine, and temper is rounded very sparse grains. The surface had been unusually well smoothed and finished, but not painted or slipped. Griffin was unable to definitely place this sherd, but expressed the opinion that it was also probably from the far southeast.

In an attempt to more clearly show the relationship of these foreign or exotic sherds the following list has been prepared. In it each of the sherds is first indicated by the number it is illustrated above in Plate , then very briefly characterized for further identification. They are grouped by levels as found at this site.

Foreign or "Exotic" Sherds

Level #1

E. Limestone tempered Plain, like Hummel Stamped.

Level #2

B. Corded and stamped - Central Basin-like.

D. Coarse - Central Basin-like.

G. Southern - Marksville-like.

H. Southern - Troyville-like.

Level #3

A. Corded incised. Black Sand-like.

C. Cross incised. Central Basin-like.

F. Plain incised. Central Basin-like.

I. Plain. Southern derived.

From this list it would appear that the foreign sherds tend to agree with the levels arrived at by other methods. The only sherd which much suggests Black Sand is found in level three along with some Central Basin-like sherds, and one plain sherd of apparently southern derivation. In level two there are more Central Basin-like sherds and also two other sherds of definite southern affinity, or perhaps derivation. In the uppermost level there are no Central Basin sherds, or anything like them, and the only at all foreign looking sherd is one from somewhat farther south in the Illinois River Valley, even though more than twice as many sherds came from level one than from level two, and more than three times as many than from level three. It is

[illegible] [illegible] [illegible] [

therefore obvious that during the earlier occupation of this site was the time when outside contacts, at least ceramically, were greatest.

One other point is of sufficient interest to warrant brief consideration. This is the temporal relationship of the Dickison site, also dug by the Illinois State Museum. The ceramic "type" which are found mutually shared are those which occur either exclusively or predominantly in the lower levels of the Havana site. On of the most definitely similar pottery "types" is the un-named plain, which occurred only sparingly in level three at Havana. The abundance of definitely cord impressed pottery at Dickison as compared to relatively little at Havana is also indicative of the time relationship of these two sites. This is true as well of the styles of design shown in the two groups of pottery, for at the Dickison site incising predominated, while at the Havana site it was only incidentally a part of ornamentation. Considering all of these factors it is the opinion of the writer that ceramically the Dickison site is earlier than the Havana site, or that such is the case for that part of it which has been dug to this time.

Netler Stamped, Hopewell Incised and Baehr Zoned were all late.
Netler plain was more abundant early, Havana plain more abundant late.
Mason Plain showed a marked increase into the later periods.
Weaver Plain showed somewhat of an increase toward late.

With this as a basis for comparison I tried three other setups; each as a percentage chart, made by combining mound sherds with the village series.

1 - All of mound # 9 was considered as late, or Layer 1.
All of Mound # 6 as early, or Layer 3.
Results;
Differences between England and Hummel Stamped were leveled off, or reduced.
Netler Stamped and Hopewell incised appeared in all levels.
Havana and Netler Plain were alike through all levels.
Mason Plain was most abundant in Levels # 1 and 3.
Weaver Plain stayed the same.
This is obviously not right, so I tried the next; -

2 - Mound # 9 - A as Level 1: B1 and B2 as Level 2: C as Level 3.
Mound # 6 - All levels as Level 2.
Results;
This was much closer to the series as shown in the village trash chart and also quite close to the original chart I made up for the paper and which you saw.
However; I made one more try -

3 - Mound # 9 - A as Level 1; B and C as Level 3.
Mound # 6 - All levels as Level 3.
Results:
This put Netler stamped in Level 3 as well as 1.
It made Netler Plain less than Havana Plain in Level 3.
It made Netler Corded about even in all levels.
It puts a high percent of Mason Plain in level 3.
This was obvilusly not right, according to the stratigraphy of the village material.

In going back over the notes, sectional diagrams, etc., which you made, and which I made as I worked on it, the real problem seems to be about this.
Mound # 9 had 167 plain sherds and 27 decorated ones.
Mound # 6 had 70 plain sherds and 11 decorated ones.
Five of the decorated sherds came from level C in Mound 6, (this is the ash layer), and the rest were from the general dig. It was thus necessary to rely on the distribution of the plain sherds to place the thing chronologically. The plain sherds show fairly high Mason, Weaver; and a very high Havana in relation to Netler Plains. No sherds came from Mound # 6 below the C or ash layer, so none were from the village trash below the mound. Also only plain sherds came from level C, or the village trash, under mound # 9.

From all these checks I am more or less thoroughly convinced that the sherds we have from mound # 6 are not earlier than my level 2, and mostly later, or probably level 1. (The bulk came from the general dig in this mound, and not from the C layer and none from the village trash, remember). Also - Except possibly layer C in Mound # 9 all of the mound is late, or my layer 1, and your C level has few sherds, all of which are plain.

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STATE GEOLOGICAL SURVEY
URBANA

November 22 - 1947.

Dear Scotty;

As I wrote you the other day I very much appreciate your having gone through the paper on Havana and sincerely criticized it for me. That is the only way we can get it out, and I am most glad you could get to it. I have just finished going through all your criticisms and am about to get down to working it over again, with the idea of whittling it down and leaving it more or less a simple statement without much in the way of comparisons,etc. The long diatribe was just an academic exercise which was of profit to me more than anyone else!

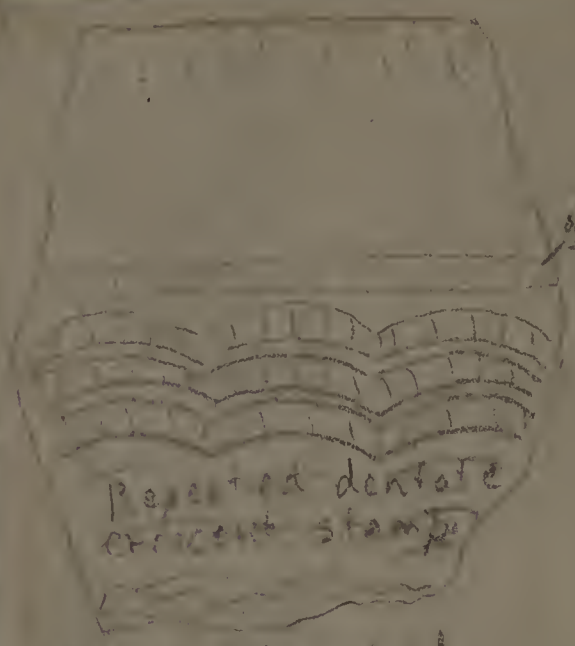
Before I get into the main discussion there is one point we should all clear up. Jimmy, I believe, has said that the sherds you got from the Snyder site do not have rounded sand grains as the main temper. I have just gotten out the sherds Dr. Titterington sent me from the mounds on the site he dug and checked them and these do have such temper predominating. As one looks at them casually they appear to have mostly white angular temper, but under a hand lense and looking at a fresh break,(I break all sherds as you know), they have dominantly sand with only a little angular,mostly white,material. If this is a real difference in our samples it is important and should be checked further. If it is simply a matter of difference in methods of study and observation we should get together. When you see Jimmy again mention it to him and check it once more together, as I have done here.

In going through all your criticisms and suggestions there is only one point at which we seem to differ. I believe it is not such a great difference as it appears, but we have to settle it to our mutual satisfaction before this is released. The main problem, except for the minor corrections and details, seems to revolve around whether or not mound 6 comes at the early end of the chronology. You say it does, having dug it, and I feel it does not, on the basis of the ceramics we have here.

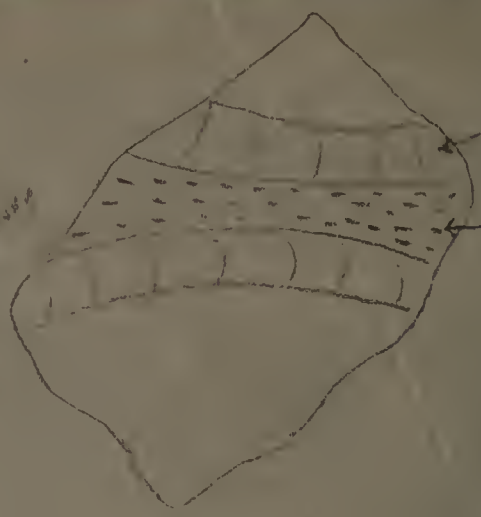
To answer your comments about the ceramic stratigraphy at the site I spent the better part of two days reviewing all the data again. You see it was so far in the past and so cold I had to get out the original counts and work from them again. To be sure I had it straight I recompiled this original data from scratch.

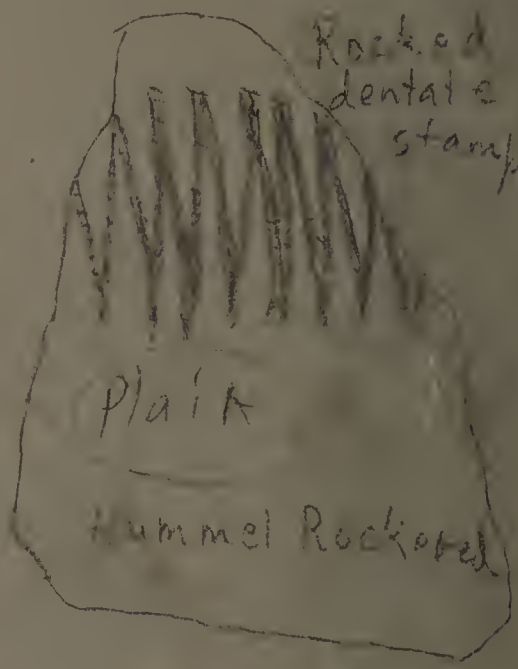
As I had done before I first made a chart, expressed in percentages, of the stratigraphy from the village material alone. I think we must assume it is in proper vertical order or we have no point of departure. For this I combined layers 1 and 2,(the upper), because of agricultural and other disturbances. Layer 3 was then 2, and layer 4 was 3 of my chart. You recall all this I am sure.

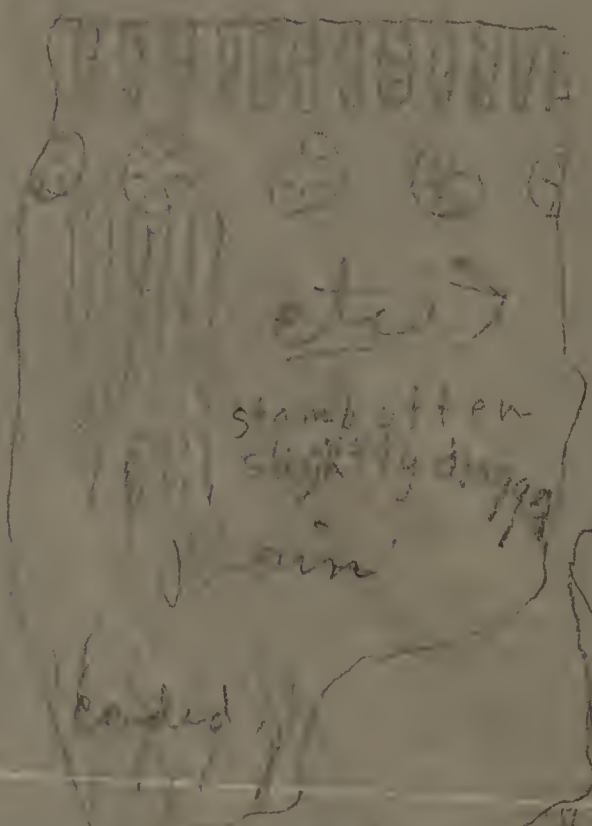
When finished this chart showed the following characteristics. England Stamped was more abundant early; Hummel Stamped more abundant later.



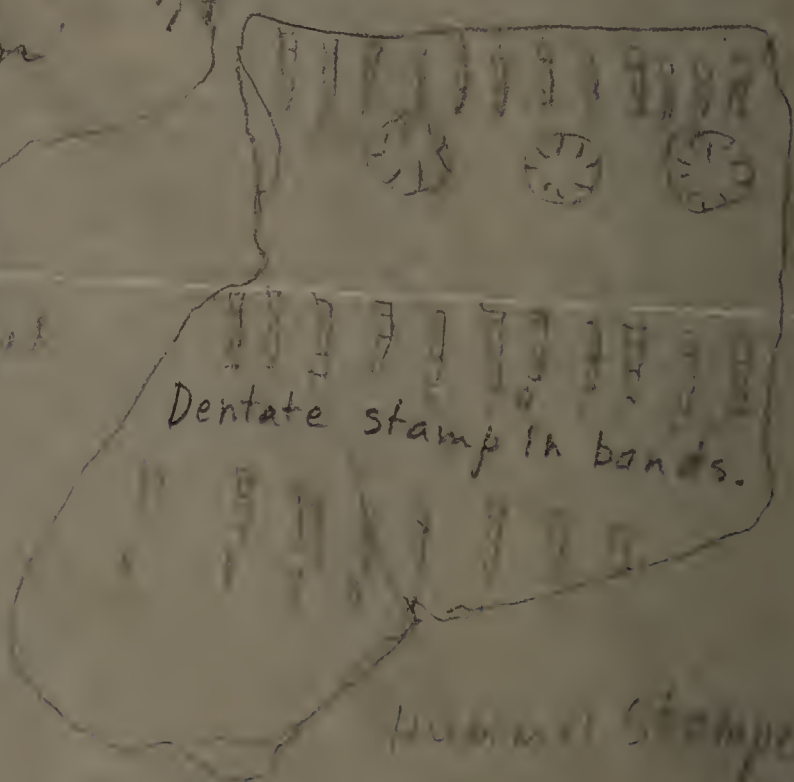
Vetlan Stamped



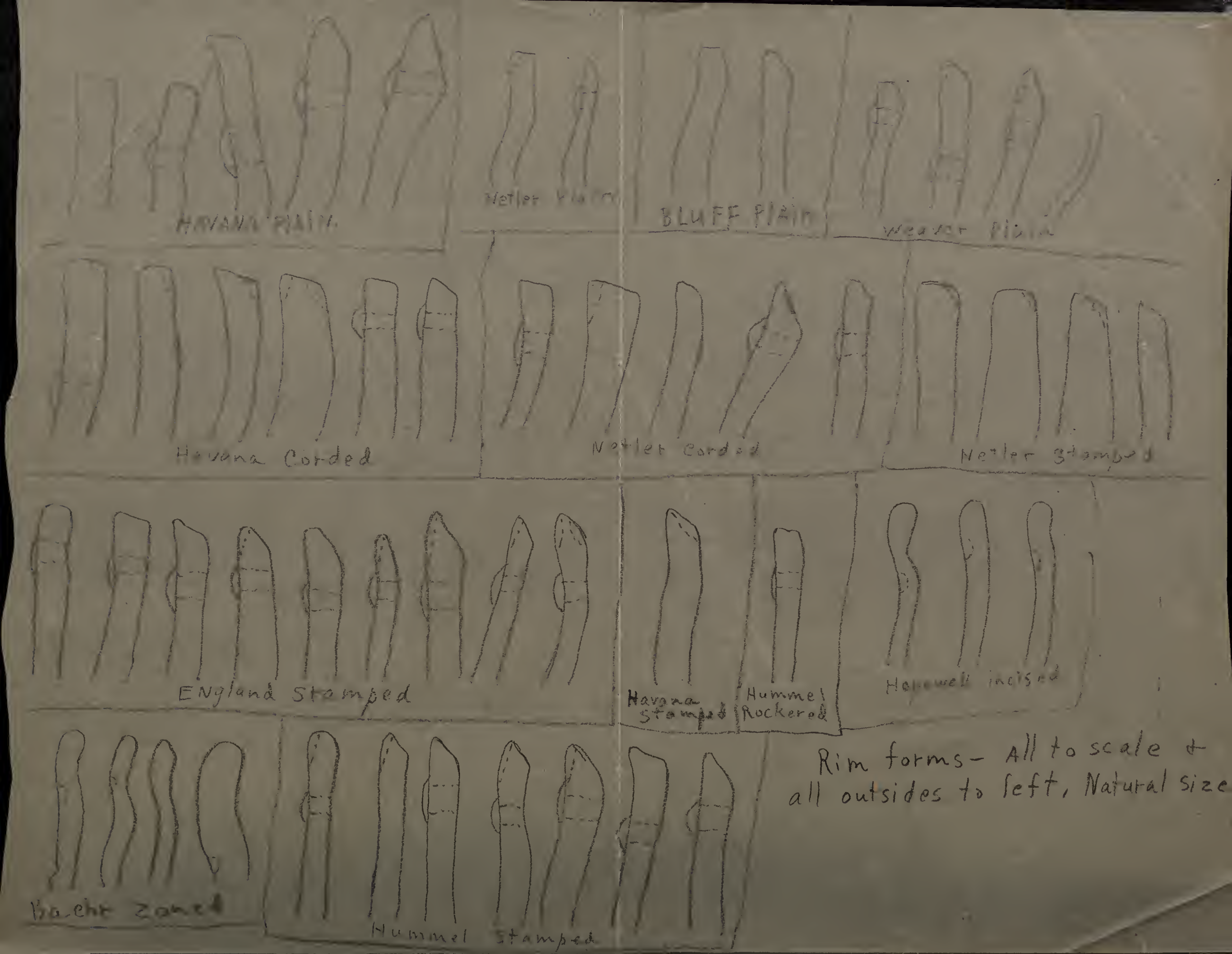




England Stamped



Hummel Stamped


Havana Plain
Netler Plain
Bluff Plain
Weaver Plain
Havana Corded
Netler Corded
Netler Stamped
England Stamped
Havana Stamped
Hummel Rockered
Hopewell Incised
Bacht Zoned
Hummel Stamped
Rim forms - All to scale &
all outsides to left, Natural size

Non-Ceramic Artifacts
F229A

Level 1	1- Tole's Type I projectile point, corner notched, tip missing
Level 2	
Level 3	1- expanded stem, Type I, tip missing

516, 517, 518, 1016, 016, 017

Weaver Non-Ceramic Artifacts

Stone and Bone

	Stone	Bone etc.
Levels 1 + 2	1-hammerstone? 1-core tool, coarse retouch 43mm. 1-projectile point-Cole's Type 1, expanded stem, 44mm. 1-basilar portion of stemmed projectile point 1-projectile point reject, side notched, poor flaking, 40mm. 1-drill from flake, worked on alternate faces, 30mm. 1-Scraper, blunt edge by retouching 1-flake scraper, 3 edges retouched, 26mm. 1-worked flake, scraper?, 34mm. 1-large flake, pointed scraper, slight retouch, 58mm	2-snail shells, possibly beads, 1 maybe perforated
Between floors 1 and 3 Pits 1 and 11 Levels 3, 4, 5	1-projectile point, Cole's type 1, side notched, 50mm 1-projectile point, Cole's type 1, tip broken, stemmed 43mm. 1-Cole's type 3, gray flint, 25mm. 1-scraper, from blade, slight retouch - 44mm. 1-flake knife from blade, both edges retouched one face, 40mm. 1-small flint flake-edged but not retouched 1-flint flake, no retouch	1-awl fragment from splinter, 60mm.
Floor 3	1-projectile point, Cole's type 1, stemmed, 66mm. 1-stemmed, ~~[illegible]~~ bunt from large flake, steep retouch, 1 face, front, width: 55mm. 1-oval, flat base flake scraper, retouch only one face, 30mm.	1-fragment of platform pipe, 1-awl fragment, from splinter 60mm.
Below Floor 3, in pits	1-large fragment, edged, no retouch, 40mm. 1-edged fragment of flint, no retouch	1-awl, splinter, distal articular surface present 165mm. 1-fish rib, not worked, 62mm. 1-antler core, broken, 55mm.
Below floor 3	1-flake scraper, pointed, worked on 2 sides	

0-0, OL1, -SL1, OL2

Weaver Non-Ceramic Artifacts

	Stone	Bone
Levels 1 and 2	1-end scraper, from flake, end retouched, 23mm.	1-fragment, badly worn awl, from Splinter, 33 mm. 1-awl, from splinter, 83mm.
Levels 3 and 4 above floor	1-chopper - from natural stone, edges retouched - 45mm. 1-flake knife, from blade, ~~with~~ welldone pressure retouch, both edges, 48m.m. 1-tip fragment of projectile point, Cole's type 1?, 28mm.	1-fishrib awl?, 82. mm.
Floor 2	1-projectile point, Cole's type 1, corner notched, 55mm.	
Under floor 2	1-chopper, from natural stone, edges retouched, 66 mm, maximum	1-double pointed awl, from splinter, tip broken, 70mm. 1-fragment from splinter, broad end polished from use

0L4, 0-20, 5L1, 10L2, 5L2, 0L2, 0-10, 75-0, 95-0, 95L3, 95L5, 95L6, 295-0, 295L5

Non Ceramic Artifacts

Flint-Arbitrary Area

Types Refer to Rediscovering Illinois projectile points

	Type 1	Type 2	Type 3	Type 4
Level 1	1- corner notched 42mm. 1- tip fragment 1- stemmed tip - missing - 46mm		1- 48mm, thick and coarse, Isosceles triangle	1- basal fragment, side notched - 40mm
Level 2	1- tipsection, flaking and thickness indicate similar to 2 points in level 5		1- very thick, possibly a scraper	
Level 3	1- tip fragment - flaking and thickness indicate similar to 2 points in level 5			
Level 4	1- basal fragment, side notched		1- leaf shaped, 31mm.	
Level 5	2- projectile points, stemmed a- 48 mm. b- 53mm.			
Level 6				
Level 7				

Arbitrary Area = OL4, 026, 5L1, 10L2, 5L2, 0L2, 010, 75-0, 950, 95L3, 95L5, 95L6, 295-0, 295L5

Weaver - Non-Ceramic Artifacts

Bone and Antler implements

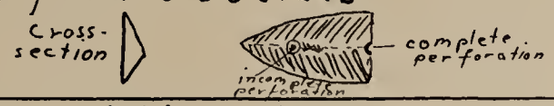
	Awls	Others
Level 1		
Level 2	1- [redacted] - fragment from splinter, 50mm. 1- [redacted] - double pointed, fragment of splinter, 96 mm.	1- Antler Core - 140 m.m.
Level 3	1- fragment of fish rib - 62 mm. 1- splinter - 55 mm. 1- fragment from splinter 48 mm.	
Level 4	1- fragment from deer ulna - 45 mm. 1- splinter, articular surface remains, 85 mm. 1- sharpened, hollow - 75 mm. 1- fish or bird [redacted] rib - 40 mm.	~~1- antler core tip~~ 1- short section antler tip, worked, 42 mm.
Level 5	1- double [redacted] pointed fragment splinter - 100 mm. 1- broken, possibly, double pointed 102 mm. 1- fish rib, worked? 50 mm.	1- antler core tip fragment, unworked, 120 mm.
Level 6	1- fragment well smoothed awl, fragment splinter - 64 mm.	1- short antler [redacted] core tip, worked, 40 mm. 1- longer tip fragment, unworked 73 mm.
Level 7		

OL4, 0-20, 5L1, 10L2,
5L2, OL2, 0-10, 75-0,
95-0, 95L3, 95L5,
95L6, 295-0, 295L6

Non-Ceramic Artifacts

Worked Stone Other than Flint

Arbitrary Area

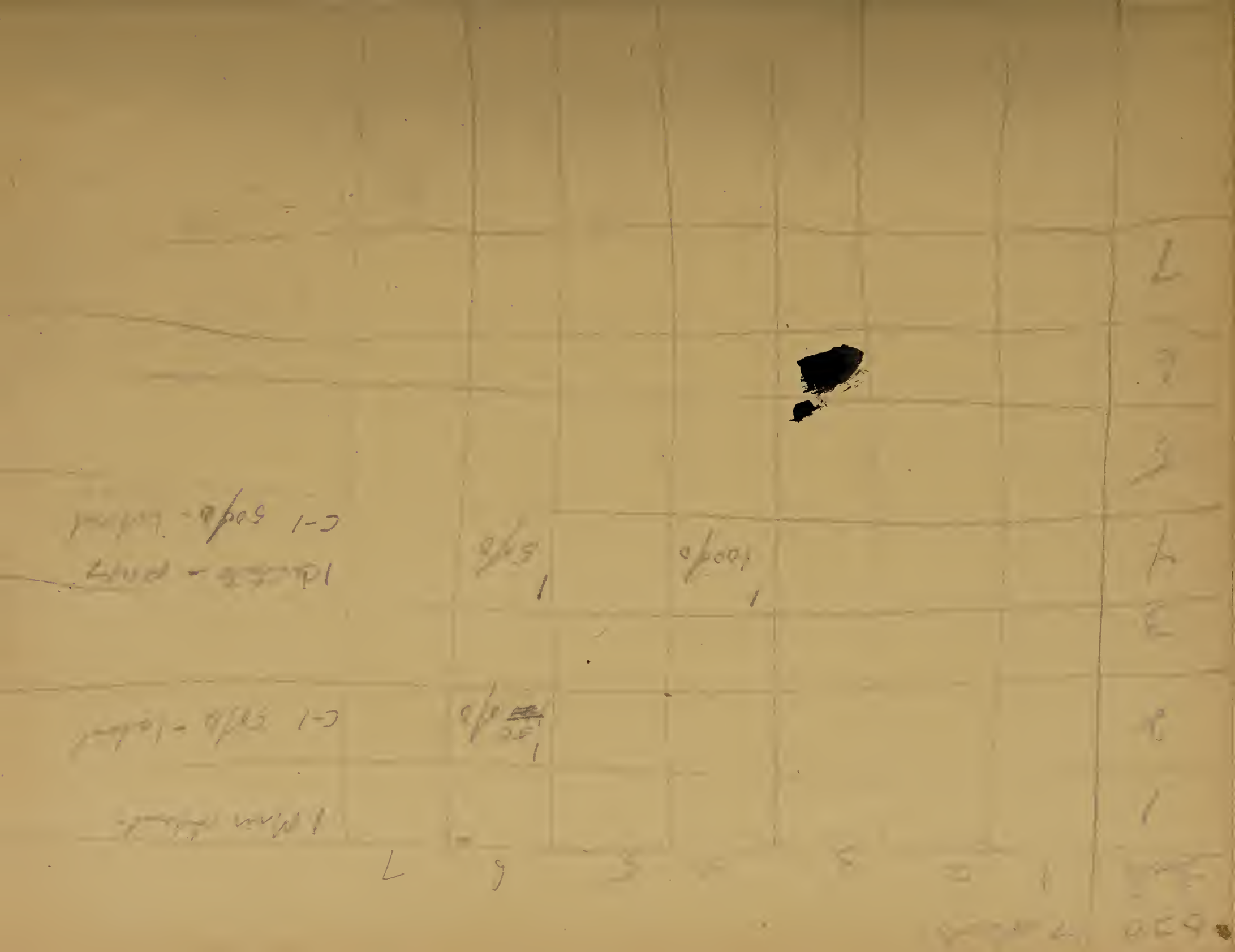
Level 1	1- fragment pointed oval reddish stone gorget, perforated from convex side only, does not extend through, complete perforation drilled from two sides 
Level 2	1- fragment quartzite pebble, split in the middle 1- sand stone pebble, round, flattened 2 sides as if worn, mano?
Level 3	1- end fragment of thin slate gorget
Level 4	1- fire blackened, somewhat calcified fragment of limestone rock
Level 5	2- hammerstones 1- sandstone 3-grooved awl sharpener
Level 6	
Level 7	

Clothing Chart

Levels	Types!	2	3	4	5	6	7
	shirt	7 shirts	4 shirts	13 shirts	22 shirts	21 shirts	
1		1 14.2%		1 7.7%		2 9.8%	
2	1 100%	2 28.4%	1 20%	2 15.4%	5 22.5%	5 24.5%	
3		2 28.4%	3 60%	5 38.5%	5 27%	5 24.5%	
4				3 23.1%	2 9%	4 19.6%	1
5		1 14.2%			7 31.5%	5 24.5%	1
6			1 20%	1 7.7%			
7		1 14.2%		1 7.7%	2 9%	2 9.6%	
	Hollow	Hollow	Hollow	Hollow	Hollow	Hollow	

3 mac.

229.M



95L4

Drawer 1 - 1 - 1 type 6
1 - 1 type 4

95L5

1 - Mins school legislation - Drawer 1
1 - 5, Drawer 2

Date	6 - [illegible]							
	1	2	3	4	5	6	7	
1								1- [illegible] P322
2				2 60%				1 Mus Rm P- M324
3								1- FCC Type 1- 330
4					1	1 100%		
5								
6								
7								

9516 | 10 cheeks

1 Miss - Red Slip

2 66⅔%

1- Collar and channel-mount dec-

1- Effigy mound type p.264

3 1-33⅓% 100% 100%

FCC- Type 1 p269

OLY 15 schools.

Tests	1	2	3	4	5	6	7	
1								
2					2 28.40			
3		100%			1 14.20			
4						1 50%		
5					3 42.60	1 [illegible]		
6								
7					1 14.20			1 Good Sec

Totals 2 schools

Tuesday [illegible]

1 – [illegible]

2 – [illegible] 5 [illegible] 1 C [illegible] [illegible] different. –

1027	17 cases						
Cases	1	2	3	4	5	6	7
1		1 ~~100%~~			1 100		
2		1 ~~50%~~	1 100%		1	2 28.4	1 28.4
3						1 14.2%	
4							1 100%
5			1			2 28.4	
6							
7						2 28.4	

	5	6	3	8	9	13		
	1	2	3	4	5	6	7	
Level 1 + 2		40%	2 ~~[illegible]~~ 66⅔%	2 12½%		3 23.1		1-169 [illegible]
Level 3 + 4 above floor	1 33⅓%	1 50%	1 33⅓	3 37½%	2 33%	6 46.2%		1- [illegible] 1- [illegible] pottery -85 1- [illegible] 18
Below 2	2 66⅔%	2 40%			7 77%	9 30.8%		1- [illegible] 1- [illegible] 1- [illegible]
Under floor 2				4 50%				1- [illegible] 1- ?

	4 / 1	7 / 2	1 / 3	14 / 4	27 / 5	17 / 6	
Females 14.2	25%	1 / 50%	/	8 / 56.8	4 / 12.3%	11 / 64.58	1- P1- Unk, [illegible] 1- Ecc- P1 1- Zone dec- 156 4- [illegible] - P1 to P10
Flow 1		of Female					
Females 3, 4 & 5 Unclassified [illegible]	1- 25%	1 / 14.5%	/	1 / 7.1	7 / 25.9%	4 / 22.16	1- P244 1 [illegible] - gray - black Ehr
Level 6		1 / 14.5%	/	3 / [illegible]	2 / 7.4%	4 / [illegible] / 1	1- Zone dec- P14 1- [illegible] - gray [illegible] out - P158
Flow 3.			/	2 / 14.2	2 / 7.4%	1 / 5.8%	
Below Flow 3 — [illegible]		1 / 14.5%	1 / 100%	1 / 7.1%	4 / 15.3%	1 / 5.88%	
Below Flow 3, Part 4	2 / 50% Defined				8 / 30.7%	2 / 11.8%	

7 unclassified

	1	2	3	4	5	6	7
1				1 50%		1 100%	
2	1 100%						
3							1 [illegible]
4							
5							3 (point [illegible] full [illegible] [illegible] [illegible] each
6							1 – [illegible] [illegible] 25 [illegible]
7				1 50%			1 [illegible]

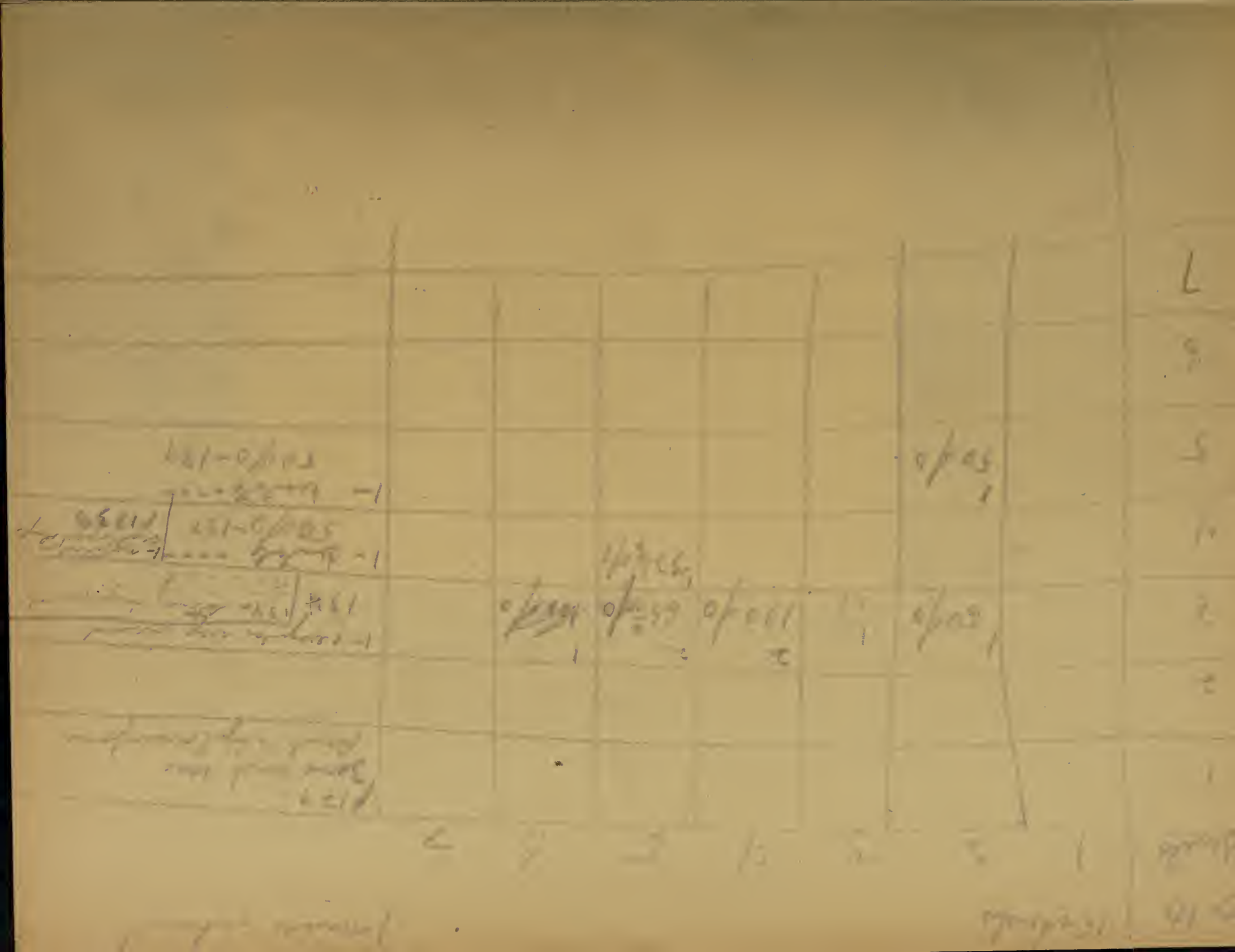
75 [illegible]

	3	4	5	6	7
1					
2					
3			[illegible]		
4				1 25%	
				25%	
5				2 50%	
6					
7					

Ecc Gp 1 - P 307

4 schools

	1	2	3	4	5	6	7	
1								1 – School is general school
2								1 – Mixed – girl & boys are permitted
3								
4								
5								
6								
7								



Scrapper